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River Management Plan



ALLEGHENY NATIONAL WILD AND SCENIC RIVER

Warren, Forest and Venango Counties, Pennsylvania



Prepared by the
Allegheny National Forest
USDA



September, 1996

**United States
Department of
Agriculture**



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PREFACE

The purpose of this Allegheny River Management Plan is to provide broad programmatic direction for the three sections of the Allegheny River designated as components of the National Wild and Scenic River System. The U.S. Forest Service has been designated as managing agency for the river. As such, the Forest Service has direct authority only over federal lands administered by the Forest Service. The Forest Service has no authority over other federal, state, municipal or private lands.

Besides specific standards and guidelines applicable to federal lands, this Plan provides broad local land management and zoning guidelines, which can be used by local municipalities to "tailor make" conservation plans which best suit the needs of individual communities while providing protection of river resources.

Current land uses of private land are not changed by the river designation. The river was designated with those uses in place, and therefore, they should not change because of designation. Also the designation does not change laws that regulate the use of private lands within the river corridor. Activities on private lands continue to be subject to existing federal, state and local laws and regulations. Prior to initiating any new activities within the river corridor, landowners should check with appropriate authorities at the local, state and federal level. Private landowners are encouraged, not mandated by the Forest Service, to consider the standards and guidelines set forth in this document when planning activities within the river corridor.

Through the continued cooperation of federal, state, and local agencies, local business and industry, and private citizens and organizations, the management of the Allegheny River and its adjacent corridor should provide for the continued existence of this special resource for generations to come.

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INTRODUCTION

THE RIVER

1. Allegheny River Watershed

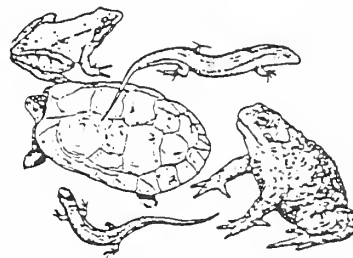
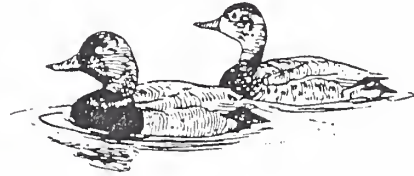
The Allegheny River Basin (see Map 1, p. 3) occupies 11,747 square miles in the states of New York and Pennsylvania. The Allegheny River is over 315 miles in length and contributes 60 percent of the Ohio River flow at Pittsburgh. Much of the upland area is rugged and heavily forested, and access roads are limited. Heavy manufacturing dominates the lower portion of the basin. Agriculture is light throughout, except for the New York portion which has a large dairy industry. There are nine U.S. Army Corps of Engineer reservoirs located throughout the basin. The main stem of the Allegheny River is navigable by commercial traffic from its mouth at Pittsburgh to East Brady, Pennsylvania 72 miles upstream (Ohio River Basin Commission, April 1980).

The proposed corridor of the Allegheny Wild and Scenic River (approximately 24,279 acres and 87 miles) represents a very small percentage of the land in the Allegheny River Basin (0.3 percent of the land area and 28 percent of its length). The designated segments begin below Kinzua Dam (upstream of Warren, PA) and end at Emlenton, PA.

2. Kinzua Dam

The Kinzua Dam has had a significant ecological impact on the Allegheny watershed. The influence of the headwater streams upriver from the dam have been negated, and natural cycles of inundation, abrasion, and deposition have been altered. Other headwater streams of the Allegheny River, below Kinzua Dam, in the glaciated watersheds drained by Brokenstraw Creek and French Creek and in the Allegheny National Forest, have a major influence on the ecological processes in the Allegheny River. French Creek is one of the most

biologically-diverse watersheds in Pennsylvania and may act as a natural source for increasing biodiversity throughout the Allegheny River watershed.



3. Allegheny Wild and Scenic River

The Allegheny National Wild and Scenic River ("Wild and Scenic" refers to the name of the entire national system and not the classification of specific designated segments of rivers) consists of three designated segments (86.6 miles) of the Allegheny River (all with a recreational classification) located in the counties of Venango, Forest and Warren (see Map 2, page 4). Rivers classified as "recreational" are those "that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment in the past (U.S.P.L. 90-542, 1968)." The three river segments are:

- * Kinzua Dam to the US Route 6 Bridge, Warren - 6.6 miles;
- * Buckaloons Recreation Area (Allegheny National Forest) to Alcorn Island, just north of Oil City - 48.0 miles; and
- * Franklin to the refinery at Emlenton - 32.0 miles.

The corridor boundary which varies in width from a few hundred feet to approximately

one half mile from the river's edge, can be seen on maps in Appendix C.

development of the river, based on the special attributes of the river (U.S.P.L. 90-542, 1986).

ESTABLISHMENT HISTORY

1. Wild and Scenic Rivers Act

On October 2, 1968, the Wild and Scenic Rivers Act became law. Its purpose is that "certain selected rivers of the Nation which, with their immediate environments possess outstandingly-remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition for the benefit and enjoyment of present and future generations (U.S.P.L. 90-542, 1986)."

2. Public Law 102-271

On April 20, 1992, an amendment to the Wild and Scenic Rivers Act, P.L. 102-271, "designated certain segments of the Allegheny River in the Commonwealth of Pennsylvania as a [recreational] component of the National Wild and Scenic River System (U.S.P.L. 102-271, 1992)."

3. Management Direction

Section 10(a) of the Wild and Scenic Rivers Act directs that each component of the system should be administered so that the values which caused that segment of a river to be designated will be protected and enhanced. Such administration is to be compatible with other uses that do not interfere with the public use and enjoyment of those values. The primary emphasis of river management will be on protecting its aesthetic, scenic, historic, archaeologic, recreation, and scientific features. Management plans may establish varying degrees of intensity for the protection and

PLANNING PROCESS

1. Advisory Councils

As required by the amendment (U.S.P.L. 102-271), volunteers were nominated to serve on the Northern and Southern Advisory Councils. In December 1992 the council members were approved by the Secretary of Agriculture. The purpose of the Advisory Councils was to advise the Secretary of Agriculture on "the establishment of the final boundaries and the management of the river segments" and to provide a forum for public involvement.

Between January 1993 and March 1994 the Advisory Councils met and held public meetings to seek public input for the Proposed Draft River Management Plan.

In March, 1994, The Northern and Southern Advisory Councils presented the Forest Service with their recommended goals, objectives and guidelines for the river corridor (see Appendix J). These goals and objectives were used in conjunction with public comments to define issues and formulate alternatives for the Allegheny River Environmental

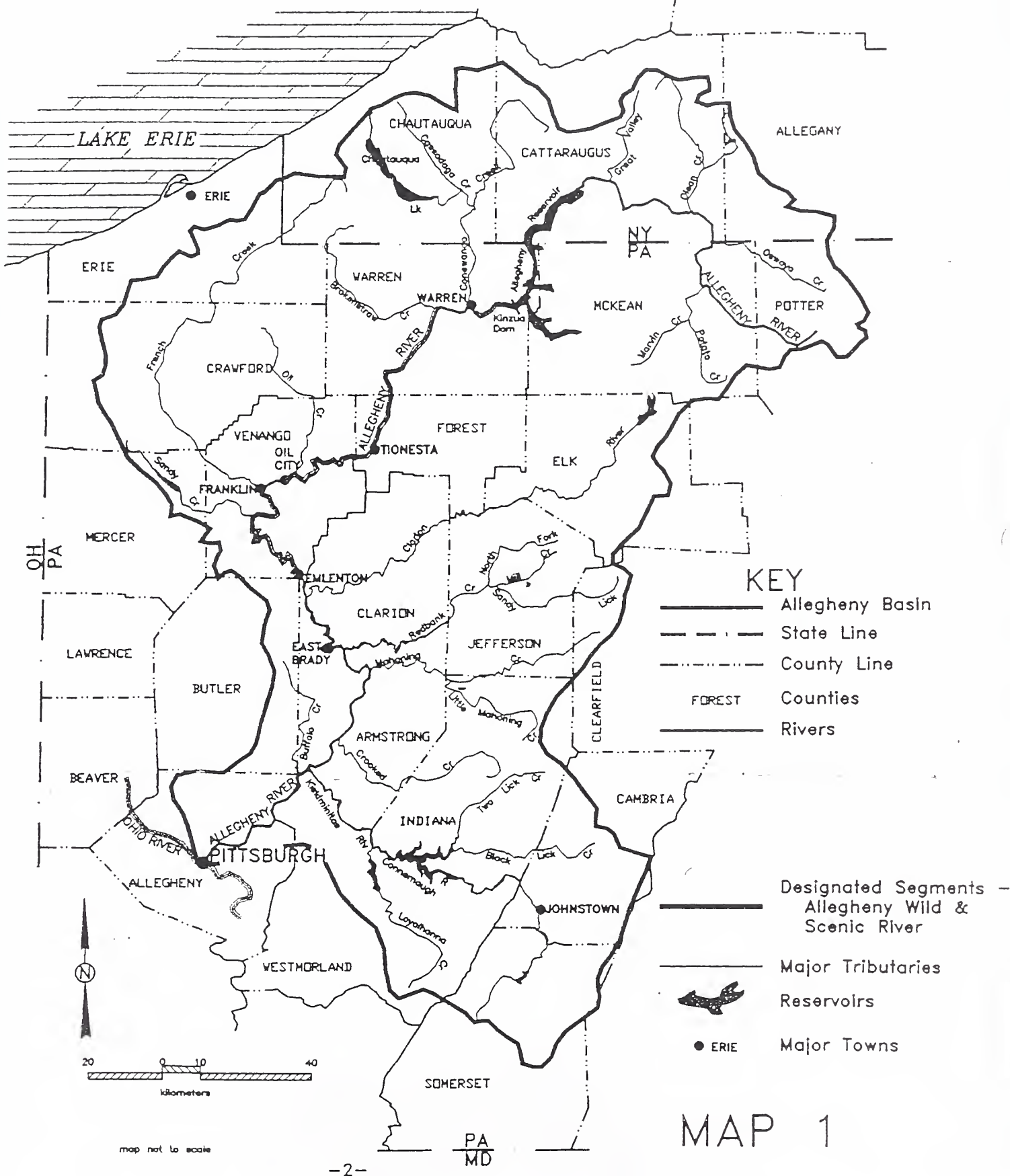
Impact Statement.

2. Public Involvement

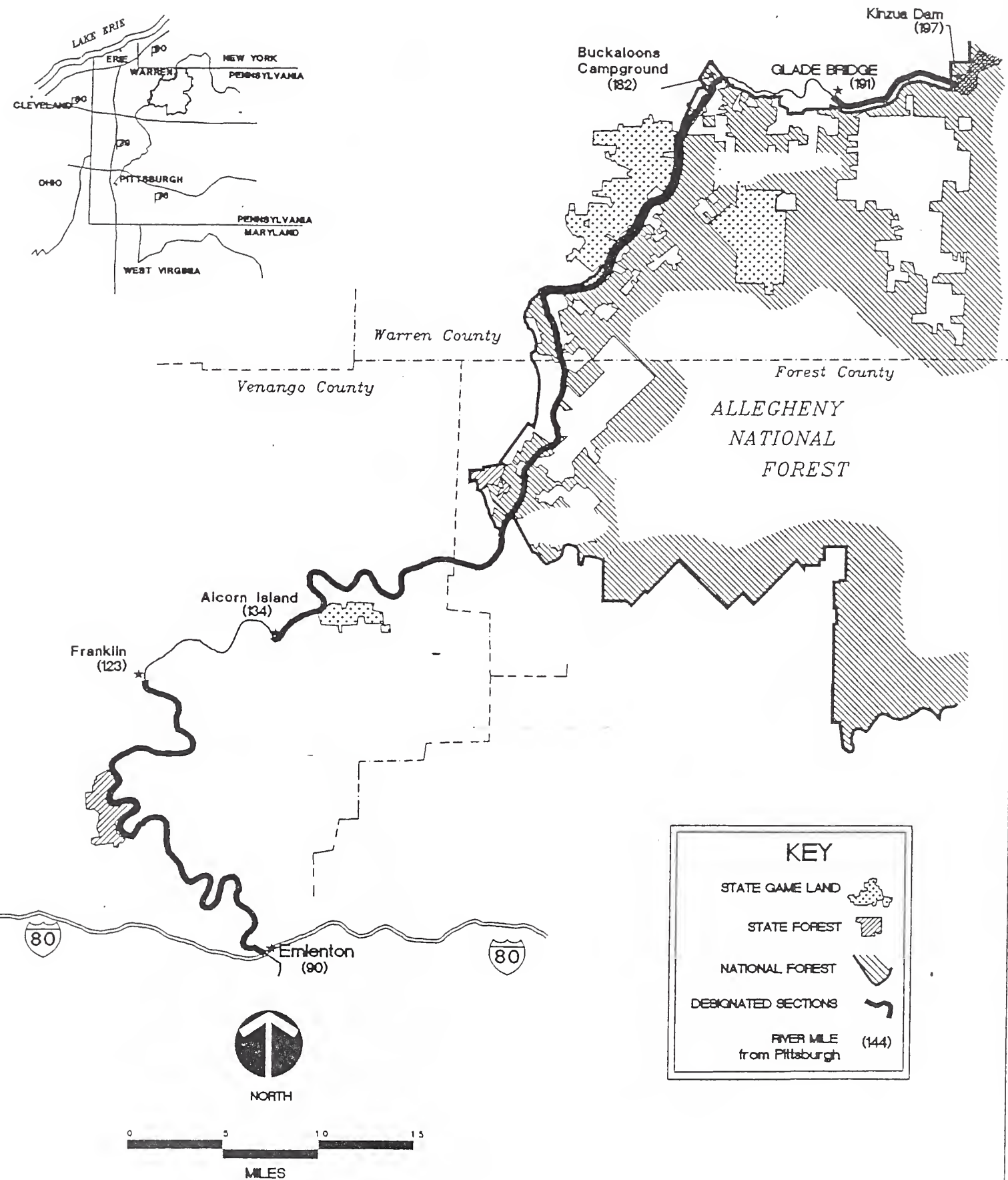
Comments on potential concerns and opportunities for managing the Allegheny River were solicited from members of the general public, other public agencies, private companies and organizations, private property owners, the Northern and Southern Advisory councils, elected officials, and Forest Service employees. Various methods were used to request comments including: a



ALLEGHENY RIVER BASIN



MAP 2 DESIGNATED RIVER SEGMENTS ALLEGHENY NATIONAL WILD & SCENIC RIVER



Notice of Intent to prepare an EIS and a Management Plan in the Federal Register filed May 19, 1994, newspaper releases, newsletters and mailings to interested parties, and formal and informal public meetings held throughout the planning process. The Northern and Southern Advisory Councils for the Allegheny Wild and Scenic River submitted objectives and recommendations for river management (Appendix J). A final scoping letter was mailed to approximately 3,000 interested parties on April 20, 1994. A wide-area news release (to such large cities as Buffalo, NY, Cleveland, OH, and Pittsburgh and Philadelphia, PA) was issued at the same time.

Scoping was conducted from April 20 through June 2, 1994 to request additional comments on potential concerns and opportunities for managing the Allegheny Wild and Scenic River. Thirty-eight (38) letters were received during the formal scoping process.

3. Management Plan

a. Corridor Designation

Section 3(a) of the Allegheny Wild and Scenic Rivers Act (U.S.P.L. 102-271, 1992) and Section 3(b) of the Wild and Scenic River Act (U.S.P.L. 90-542, 1968) require that "the agency ... [shall] establish detailed boundaries". Boundaries were drawn so that the values for which the river was designated were protected.

Terminal boundaries for the three segments of the Allegheny Wild and Scenic River were determined by the U.S. Congress and set down in the Allegheny Legislation.

Because of the federal designation of the Allegheny as a component of the National Wild and Scenic River System, specific sections of the State Waterways Regulations are applicable to designated river lands within 100 feet of the high water mark, between the terminal boundaries. Permit applications pertaining to certain state-regulated activities within the designated river

sections are to be reviewed for effects on river values and consistency with designated rivers under the Wild and Scenic River Act.

The Forest Service has had the responsibility of determining landward corridor boundaries. Boundaries were to be drawn to include as many values as possible for which the river was designated were protected.

By law (U.S.P.L. 90-452, 1968), "the boundaries shall include an average of not more than 320 acres of land per mile measured from the high water mark on each side of the river." (This also represents an average of 1/2 mile wide for the length of the corridor.) This means that for the 86.6 miles of designated river, the corridor could encompass no more than 27,712 acres.

The definition of the landward corridor boundary is important for several reasons.

- * It defines the area where the Wild and Scenic Rivers Act applies. Outstandingly remarkable values within the corridor are to be protected and enhanced. The boundary defines the area where the Management Plan will be applicable. The managing agency's authority to acquire land outside of the ANF proclamation boundary for resource protection or administrative purposes under the Act is limited to lands within the corridor boundary.
- * The definition of a river corridor boundary enables local municipalities to assess the area which has the most impact on the river and river values and to determine what land use planning and local regulations best suit the needs of the community while protecting the river and maintaining river values.

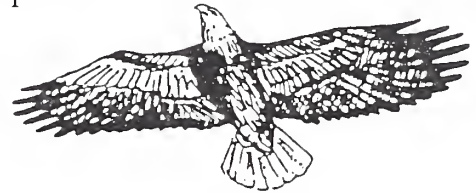
The following criteria were used to determine the river corridor boundary:

1) **Outstandingly Remarkable Values:** The areas which are important to (1) the protection and enhancement of "outstandingly remarkable " values and 2) for providing a focus for corridor management guidelines are included in the corridor. The outstandingly remarkable values for the Allegheny River include scenic, heritage, natural, recreational, scientific, and ecological values.

2) **Allegheny River Valley:** Ecologically, watersheds are the ideal management areas for rivers. Using this concept, preliminary boundaries were drawn from ridgetop to ridgetop. This worked well for the lower river where the valley is steep and narrow, and the resulting corridor was within the 1/2 mile boundary width. The upper section of the river, however, often has broad floodplains, and this initial ridgetop boundary exceeded the half mile average. It was therefore necessary to adjust the boundaries to be within the legal acreage limits (320 acres average per river mile). Adjustments were made in areas having the least impact on river values.

3) **Riparian Areas:** Riparian areas are zones of direct interaction between terrestrial and aquatic ecosystems [USDA Forest Service, 11/3/93]. Recognized ecological values found in or near the riparian zone are hydric soils, wetlands, and associated plants and animals. Protection of these values is necessary to maintain water quality and habitat diversity for river ecosystems and was considered when defining corridor boundaries. (for a more detailed discussion of the riparian zone, see pages 12-14.)

4) **Threatened, Endangered, and Sensitive Species Habitat:** The Pennsylvania Natural Diversity Inventory was used to include, within a reasonable distance of the river, all listed, occupied habitats of threatened, endangered and sensitive species.



5) **Tributaries:** Tributaries are ecologically important to the Allegheny River. Because of the acreage constraints on the river corridor (an average of 320 acres per river mile), it was impossible to include entire tributaries in the river corridor. Therefore, the boundary was initially drawn across tributary valleys at the nearest recognizable high point above the Allegheny River. Some adjustments were made to include critical riparian habitat, ecologically sensitive areas or areas with special features, such as waterfalls.

6) **Heritage Values:** Corridor boundaries were drawn to include as many identified, potentially-significant heritage resources as practical. Deviations from the half-mile limitation were made for significant or potentially-significant sites only.

7) **Scenic Values:** The Forest landscape architect identified outstanding scenic views by a visual analysis and helped to further define corridor boundaries using three distinct landscape types: 1) broad river valley, 2) a narrower river valley with islands and 3) a narrow, sharply-winding valley. (For a more detailed discussion of the three landscapes found within the river corridor and the visual environment, see pages 14-16.)

Neither ownership nor zoning were considered in boundary delineation. The intent was to keep the boundary focused on resource values only.

The corridor boundary was not adjusted to include or exclude abandoned wells, dumps, and acid mine drainage sites. The corridor is defined by identified critical values.

The proposed corridor boundary encompasses approximately 23,000 acres, well within the 27,712 acres permitted by law. See proposed corridor maps in Appendix C.

b. Managing Authority

Public Law 102-271 states that the upper and middle segments of the river (between Kinzua Dam and Oil City) will be administered "by the Secretary of Agriculture ... through a cooperative agreement with the Commonwealth of Pennsylvania and the counties of Warren, Forest and Venango, as provided under section 10(e) of this [Wild and Scenic Rivers] Act (1992)." The lower segment of the river (between Franklin and Emlenton) will administered "by the Secretary of Agriculture ...through a cooperative agreement with the Commonwealth of Pennsylvania and Venango County, as provided under section 10(e) of this [Wild and Scenic Rivers] Act (U.S.P.L. 90-542, 1986)."

"The Federal agency [US Forest Service] charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include

or adjoin State- or county-owned lands (U.S.P.L. 90-542)."

c. Federal/Commonwealth of Pennsylvania/Local Government Roles

Federal: The role of the Federal government (the Forest Service) will be to act as a lead agency in the management of the designated segments of the Allegheny Wild and Scenic River as detailed in the River Management Plan and to work cooperatively with other entities involved in the management of the river.

Commonwealth of Pennsylvania: Acting under a cooperative agreement with the USDA Forest Service and others, the Commonwealth of Pennsylvania will provide guidance, technical assistance, and recommendations for implementation of the management plan as well as carrying out both regulatory and non-regulatory responsibilities.

Local Governments: The role of local governments is to act as cooperators to carry out the management of the river which includes protection and enhancement of river values. This could be accomplished through cooperative agreements between the various entities concerned with management and activities within the river corridor.

d. Relationship to the Allegheny National Forest Land and Resource Management Plan

The Allegheny National Forest Land and Resource Management Plan (Forest Plan), approved in 1986, "provides a management program reflecting a mixture of management activities that allows for use and protection of national forest resources while fulfilling legislative requirements and addressing local, regional and national issues (USDA Forest Service, 1986)." Federal lands within the Allegheny National Forest (ANF) boundary that lie within the

designated river corridor are managed according to standards and guidelines in the Forest Plan.

The ANF Forest Plan will be amended by this Allegheny River Management Plan.

Under the current Forest Plan, Management areas within the corridor will remain the same: MA 5 (Allegheny Islands Wilderness), MA 6.1 (recreation and wildlife emphasis), MA 6.4 (National Recreation Area), MA 7 (recreation area management) and MA 8 (unique areas). The Standards and Guidelines for both the appropriate Management Area and the Wild and Scenic River Management Plan will apply. When determining appropriate management within the corridor, the Forest "shall take such action respecting management policies, regulations, contracts, plans, affecting such lands, ... as may be necessary to protect [the river] in accordance with the purposes of the [Wild and Scenic Rivers] Act. Particular concern shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act (U.S.P.L. 90-542, 1986)."

e. Relationship to Other Management Plans

Both the Pennsylvania Bureau of Forestry and the Pennsylvania Game Commission have management plans for lands which they administer within the river corridor (Clear Creek State Forest and State Game Lands #47, #86 and #309). Protection of river-related resources were considered when these plans were developed.

The designated river corridor between Franklin and Emlenton is part of the

newly established Oil Region Heritage Park (OHRP), one of five Heritage Parks in Pennsylvania. The OHRP is guided by the "Oil Region Heritage Park Management Action Plan" with an emphasis on cultural and historic interpretation, the natural environment and recreation.

The Allegheny Valley Trails Association (AVTA), a private non-profit citizens group, with the assistance of the National Park Service, has completed a "Feasibility Study and Development Plan" for rail-to-trail development in portions of the river corridor between Franklin and Emlenton. AVTA has completed construction of five miles of trail along the river in Cranberry Township with another five miles soon to begin construction. Cranberry Township has subsequently just completed a detailed development plan for the trail and river corridor in their township.

Coordination has been ongoing between these plans and the Allegheny River Management Plan. This cooperative planning effort will continue to be an important part of implementing the Management Plan which will reduce duplication of effort and lead to mutually-beneficial projects.

Forest County has recently completed a "Forest County Action Plan" to help establish a more stable and diverse economy for the county. The Action Plan proposes to create and promote recreation and tourism in the county partly by focusing on the Wild and Scenic River corridor through tourist promotion information. Coordination with this plan is ongoing also.

ENVIRONMENT

ECOLOGICAL PATTERNS AND PROCESSES

The 86.6 miles of the Allegheny River under National Wild and Scenic River designation are a small part of the Allegheny watershed ecosystem. This ecosystem includes the physical area or basin drained by the Allegheny River, encompassing an area of almost 12,000 square miles.

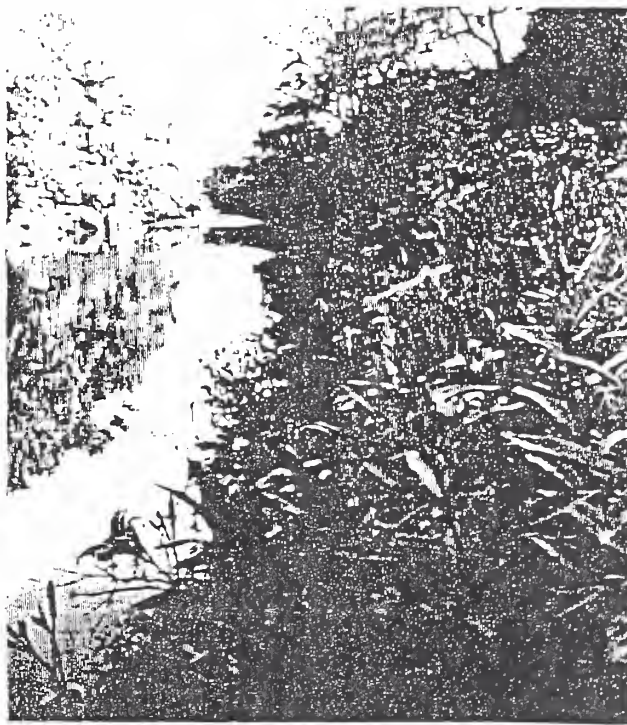
Small headwater streams provide high levels of water quality and quantity, sediment control, nutrients, and woody debris for downstream reaches of the watershed; therefore, they are largely responsible for maintaining the quality of downstream riverine processes and habitat for considerable distances (Doppelt et al. 1993).

The Kinzua Dam has had an ecological impact on the Allegheny watershed. The influence of the headwater streams upriver from the dam have been negated and natural cycles of inundation, abrasion, and deposition have been altered. Headwater streams of the Allegheny River, in the glaciated watersheds drained by Brokenstraw Creek and French Creek and in the Allegheny National Forest, have a major influence on the ecological processes in the Allegheny River. French Creek is one of the most biologically-diverse watersheds in Pennsylvania and may act as a natural source for increasing biodiversity throughout the Allegheny River watershed.

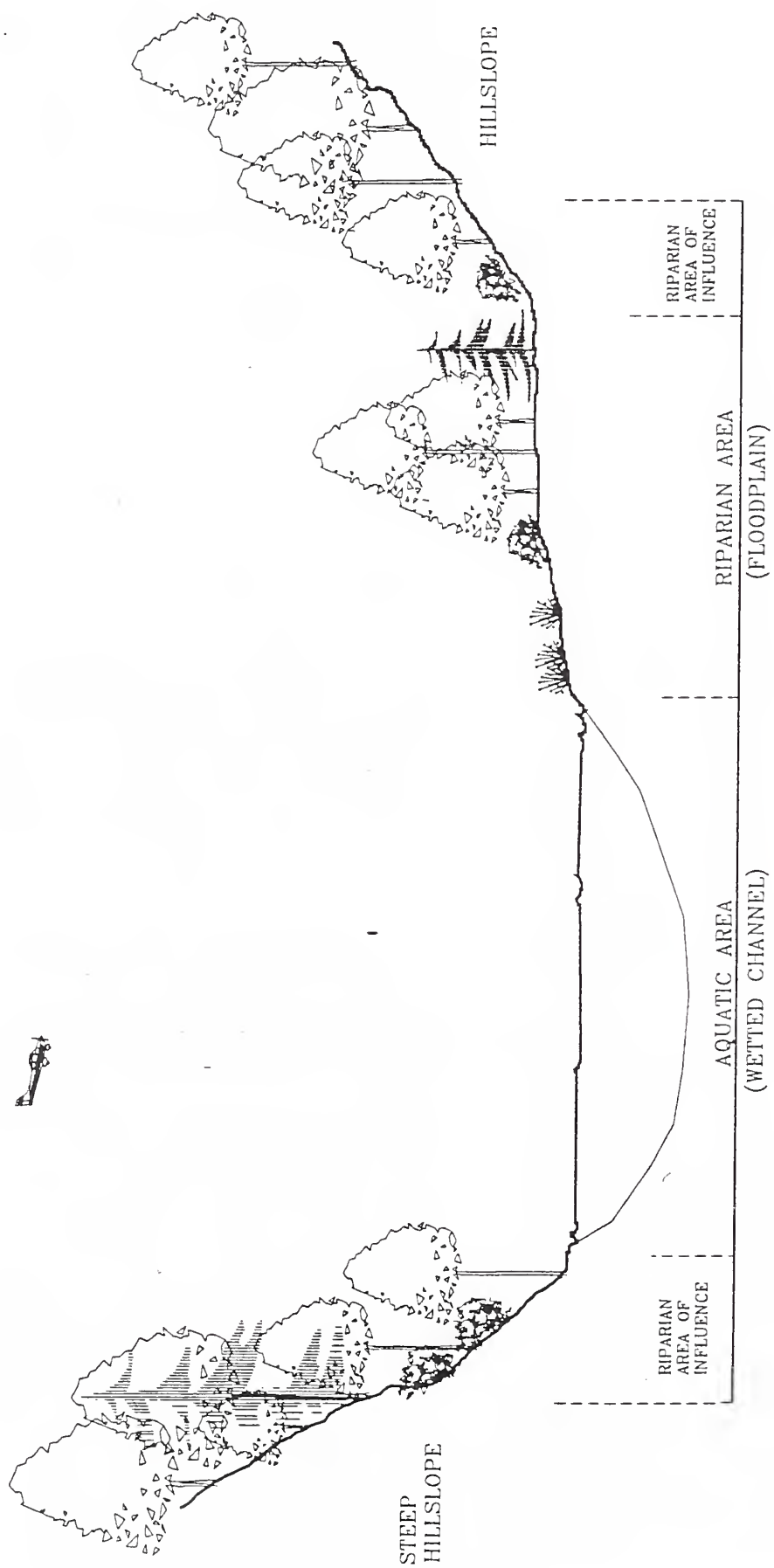
Within the broad watershed ecosystem is the riverine-riparian ecosystem which includes the processes and elements that interact in the riparian and flowing water areas. Riverine-riparian ecosystems play an important role in providing habitat for both terrestrial and aquatic biodiversity. They provide life-supporting habitat for many vertebrate and invertebrate species, and natural highways for migratory birds.

The riparian zone (see Figure A, page 10) is a key part of the riverine-riparian ecosystem.

Riparian zones link the terrestrial environment with the aquatic environment and provide shade and input of nutrients and organic materials. Leaves and woody debris from the riparian zone "feed" the water with nutrients for growth of aquatic plants and provide food and habitat for the insects upon which fish feed. This debris also contributes to the physical structure of the system by slowing water velocity and deflecting its course. As the water is slowed and deflected, it pushes against the banks and into the soils underlying the adjacent flood plain, thereby contributing to the local water table (Doppelt et al., 1993).



The meandering riverine system is a dynamic changing system that slows water velocity in flood stages, burying and storing organic materials upon which certain species depend, while releasing the degraded materials that are crucial to the survival of other species. The dynamic changing nature of the riverine system creates a mosaic of seasonal habitats that support diverse flora and fauna connected by complex ecological processes.



TYPICAL CROSS SECTION
ALLEGHENY RIVER RIPARIAN AREA

PHYSICAL ENVIRONMENT

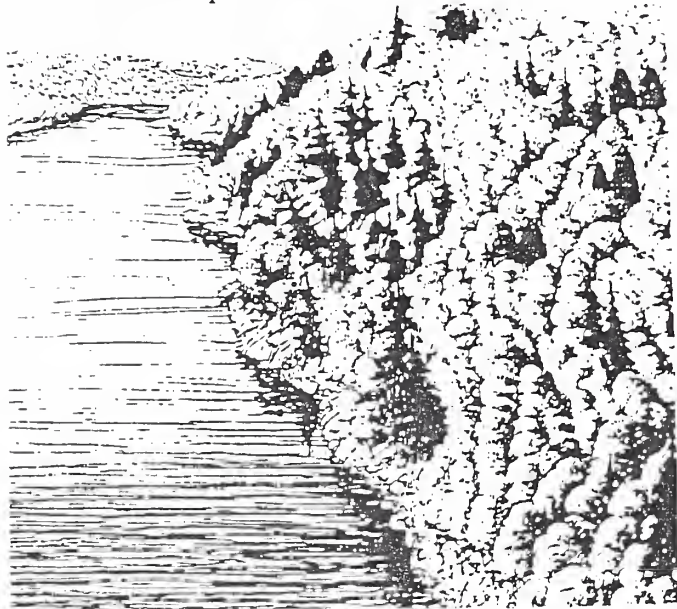
GEOLOGY

The Allegheny River is located in the Northern Unglaciated Allegheny Plateau Section of the Appalachian Plateau Geomorphic Province. It flows from its origins in Potter County, PA, northwest through a small portion of New York State then back down through northwestern Pennsylvania, converging with the Monongahela River at Pittsburgh to form the Ohio River, a distance of over 300 miles.

Over time, the river has cut a deep, V-shaped valley into the plateau. Narrower portions of the valley range from 400 to 600 feet wide, with broader portions up to 1,000 feet wide. The Allegheny River drops a total of 395 feet in elevation over the 107 miles from Kinzua Dam to Emlenton, from 1,225 to 830 feet.

The Allegheny River flows in a relatively straight course through the upstream areas. As it nears Oil City, it begins to form the long sweeping meanders characteristic of mature rivers. Although many small streams flow into the river, there are only five major tributaries between Warren and Emlenton: the Conewango, Brokenstraw, Tionesta, Oil, and French Creeks.

There are approximately 131 islands present throughout the designated portions of the river. The islands are constantly changing due to erosion and deposition.



The shoreline consists mainly of steep hillsides that rise from the river. These slopes are interspersed with flat benches that occur on straight stretches, at confluences with other streams and on the inside of bends. Most development is located on these benches.

A veneer of unconsolidated materials overlies the bedrock: residuum on flat and gently sloping uplands, colluvium on the base of steep hillsides, and alluvium in narrow valley bottoms. Thicker deposits of clay, silt, sand, and gravel are present in wider valleys. The river islands are comprised of sorted sequences of gravel, sand and silt. Beneath these sediments, the upper Devonian, lower Mississippian, and Pennsylvanian bedrock is composed of a mixed siliciclastic sequence of sandstone, siltstone, shale, subordinate conglomerate, occasional limestone, and coal.

ENERGY MINERALS

Oil and gas exploration and production have occurred throughout the region since the 1860s. Producing reserves are present along most of the river corridor. Due to many variables, such as market conditions, it is difficult to predict future activity. Development for oil and gas is located through the designated river corridor.

Many of the several hundred abandoned oil and gas wells present within the river corridor may be impacting water quality. The Pennsylvania Department of Environmental Resources (PA DER) has inventoried many of the wells, determined the urgency with which they need to be treated, and placed them on either the State Orphan Well List (for non-problem wells) or the Abandoned Well List (for problem wells). Those in the Abandoned Well List will be plugged when and if funding becomes available.

There are abandoned coal mines adjacent to the river corridor in Venango County. Several of the mines are discharging acid mine drainage into Big and Little Scrubgrass Creeks, both tributaries in the southern section of the river corridor.

SAND AND GRAVEL

Sand and gravel aggregates deposited by glacial

meltwaters have been mined in the river corridor since the river valley became inhabited, resulting in the removal of about five percent of the river bottom gravel resources. In 1972, the PA DER (now Department of Conservation and Natural Resources) issued new guidelines for the removal of aggregate material from the Allegheny River. These restrictions led to the abandonment of five dredges which were operating on the river north of East Brady.

There are currently two active sand and gravel pits operating within the river corridor. Future quality aggregate supplies in the region are limited to the resources along the river and outside of the river corridor.

SOILS

The river corridor soils are very homogeneous from the Kinzua Dam to Emlenton. The plateau top soils are sloping, medium textured, moderately to well drained, very strongly acid, and have moderately-deep rooting depths. The side slope soils are sloping to very steep, medium textured, moderately to well drained, very strongly acid, and have a moderately-deep rooting depth. Soils of the plateaus and side slopes are derived from residuum of sandstone, siltstone and shale. Those soils adjacent to the river range from very poorly drained to well drained. They are nearly level, medium textured, strongly to very strongly acid, and have deep rooting depths. Although some waters drain through glacial till areas, the valley is dominated by the residual materials from sandstone, siltstone, and shale.

WATER

Water Flow and Water Levels - Stream flow in the Allegheny River is regulated by Kinzua Dam, which is operated by the U.S. Army Corps of Engineers. The dam, located at the northernmost point of the designated river corridor, was constructed for two purposes: 1) flood control for downstream communities, and 2) low flow augmentation for recreational purposes and to reduce the effects of acid mine drainage from tributaries within the Allegheny watershed.

Average daily flows for each month of the year are displayed in Table II-1 (page 13) for four gauging stations on the river, beginning with the most upstream station at Warren, and continuing downstream to the Parker station. Parker is actually downstream from the designated river corridor, but is the nearest station to the southern edge of the corridor. The data for Warren is based on only five years of information since this station was newly created in 1988. The flow data from the Warren station appears inflated, because it is short term (five years) and for years of unusually high flow. Therefore, for some months, the flows are higher at Warren than downstream at West Hickory. Previous to installation of the Warren station, flows were measured between Kinzua Dam and Glade Bridge. Average daily flows were calculated from the past 15 years of data for the three other stations.

Based on 15 year averages, low flow periods occur during summer and into the early fall season. Streamflows begin to increase during the fall months, reaching their highest flows in late winter to early spring (April).

Extremes for streamflow were calculated only for the Franklin station. Before Kinzua Dam was completed in 1965, the instantaneous maximum flow recorded was 138,000 cubic feet per second (cfs), and the instantaneous minimum flow recorded was 334 cfs (USGS, 1994). After Kinzua Dam began operating in 1965, the instantaneous maximum flow recorded was 85,400 cfs (USGS, 1973), and the instantaneous minimum flow recorded was 610 cfs (USGS, 1967).

Water Quality - The designated sections of the Allegheny River are listed under PA DER's Chapter 93 water quality standards as a warm water fishery, implying waters of the river will be protected as such to maintain and propagate fish and additional flora and fauna which are indigenous to a warm water habitat (PA DER, 1987). Water supply uses considered in determining water quality criteria of the river include drinking, industrial, livestock, wildlife, and irrigation. Recreational activity uses considered in determining water quality criteria include boating, fishing, water contact sports, and aesthetics.

The designated river corridor encompasses portions of the upper Allegheny River subbasin only. To date, over 2,000 of 5,000 stream and river miles have been assessed in the upper Allegheny River subbasin. Overall, water quality is good, with localized degraded sections (Pennsylvania Department of Environmental Resources, 1994).

Since the creation of Kinzua Dam, the section of the Allegheny River between the dam and approximately Glade Bridge in Warren has become more of what would be classified as a cold water fishery rather than a warm water fishery as it currently is listed by PA DER. Cooler water temperatures are supporting a trout fishery that once did not exist.

RIPARIAN ZONE

The Allegheny River riparian zone has alluvial or terrace soils and is located on what is commonly referred to as the "flood plain". Along the river lies a "riparian area of influence" which provides vegetative buffers, shade, organic matter, including large woody debris, and bank protection. This area has sloping colluvial or sloping to steep upland soils.

Wetlands are intermingled the entire length of the river corridor. Diverse sites for plants, vertebrates and invertebrates, these wetlands protect the river by storing excess water and slowly releasing it and by filtering the water as it passes through the wetland.

TABLE II - 1
MEAN DAILY FLOWS AND RECREATIONAL REQUIREMENTS (cubic feet/second)

Month	Gauging Station			
	Kinzua Dam ¹	West Hickory ²	Franklin ²	Parker ²
October	6,280	5,140	8,740	10,100
November	8,010	7,784	12,695	15,794
December	6,295	9,713	15,502	19,795
January	10,040	-	14,213	17,707
February	8,946	8,286	14,245	18,617
March	6,427	9,583	16,820	22,375
April	11,163	10,950	18,485	23,499
May	7,389	6,790	11,011	14,597
June	4,004	5,531	9,046	12,129
July	3,682	3,724	5,958	8,521
August	2,279	2,740	4,099	6,051
September	3,700	3,709	5,733	7,791
Required to Fish	500	200	510	2,070
Required to Canoe	1,000	200	830	3,100

¹ Water Years* 1989-1993 - Station established in 1988. (Previous gauging station upstream of Glade Bridge discontinued in 1972, and station downstream of Kinzua Dam discontinued in 1988.)

² Water Years 1979-1993

* Water Year - A one year period of time from October 1 to September 30.

Riverine-riparian zones are interconnected to the riparian zones of springs, seeps, and intermittent and perennial streams that drain into the river.

VISUAL

Three different landscape characters exist in the river corridor:

Landscape 1: Broad Valleys with Pastoral/Rural Scenes - A broad river valley characterized by a wide river with slow eddies and having a distinctly pastoral landscape consisting of farmland, rural settlements, rustic cabins, and river towns.

Landscape 2: Narrow Valley with Natural Appearing Islands - A somewhat narrower river valley dotted with many islands which divide the normally wide river into smaller, faster-flowing channels. This gives the user an intimate experience with the river.

Landscape 3: Narrow, Sharply Winding Valley with Steep Sideslopes - An unusually narrow valley that has very steep slopes and bends so sharp that they nearly turn back on themselves. This topography forms distinct focal landscapes with strong spatial enclosure, a feature very uncommon for rivers of this size and length.

Landscapes 1 and 2 (see Figure II-B, page 16) can be found in the sections of river from Kinzua Dam to Oil City, and Landscape 3 (see Figure II-C, page 17) below President.

Within these three landscapes there exist certain lands which are critical to maintaining the river's visual resources called "critical visual areas." On the Allegheny River, these areas include all of the river islands, shoreline areas and focal landscapes.

Of the shoreline landscapes, nearly 90 percent are in private ownership. However, about 70 percent of the private acreage is either already developed for year-round homes, seasonal homes, cabins, or communities, or has a 30 percent or greater slope.

The island landscapes are important in maintaining the character of the river, particularly the upper river. Since most are

uninhabited and undeveloped, they lend a wildness and intimacy to the river experience.

BIOLOGICAL ENVIRONMENT

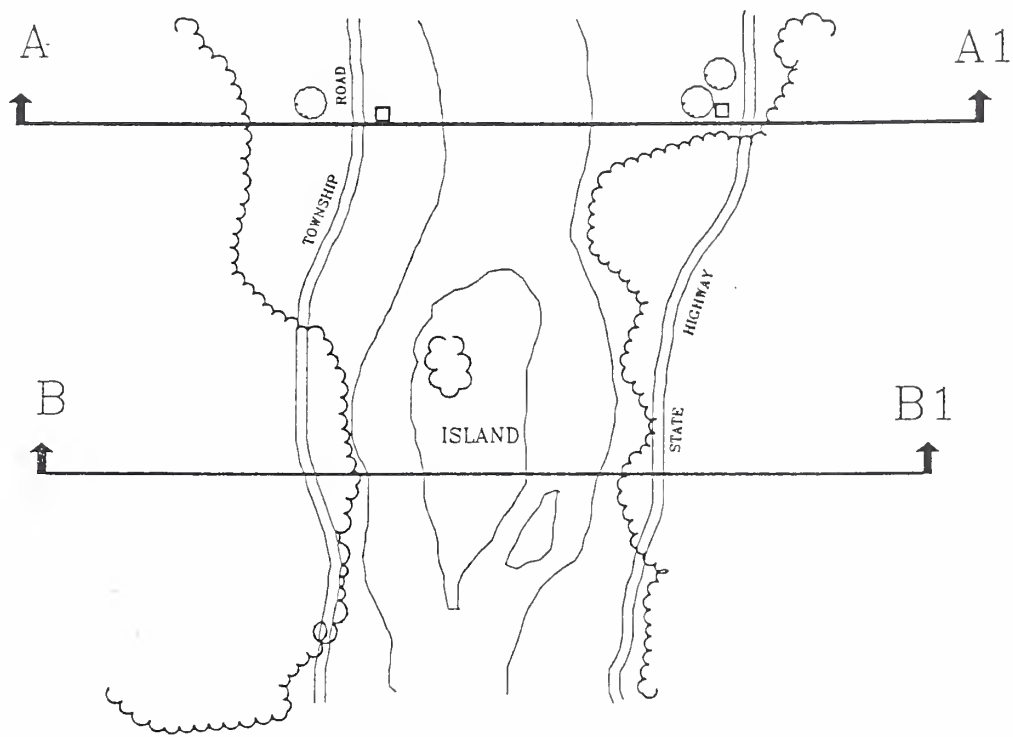
VEGETATION

A variety of vegetative communities is found within the river corridor. They can be classed as forested or non-forested. Approximately 73 percent of the designated river corridor is forested. Numerous timber types, including oak, Northern and Allegheny hardwoods and hemlock can be found throughout the corridor. Occasional pure stands of tulip poplar, usually located on abandoned agricultural land, and sycamore, are found in the flood plain. Elm, aspen, sycamore, cottonwood, butternut, willow, silver maple, and alder predominate on the river bottoms and islands. Butternut, found in the river corridor, is a regionally sensitive species and is listed as a category 2 species by the U.S. Fish and Wildlife Service.

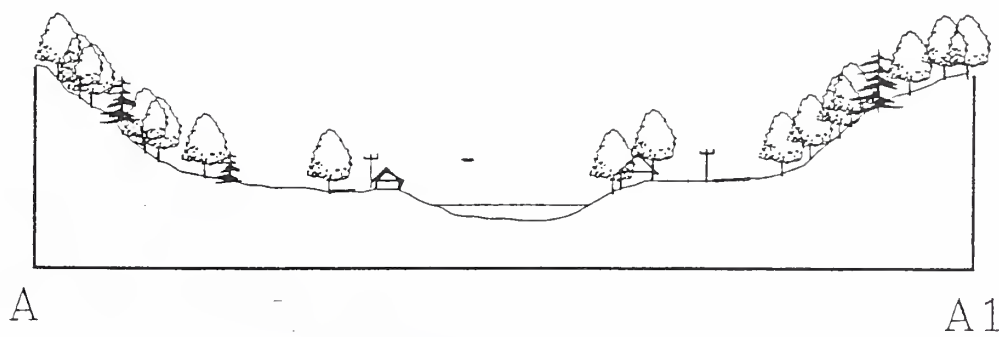
Non-forested areas are generally found in the flood plain and can be residential, agricultural or natural areas.

Both forested and non-forested wetlands can be found.



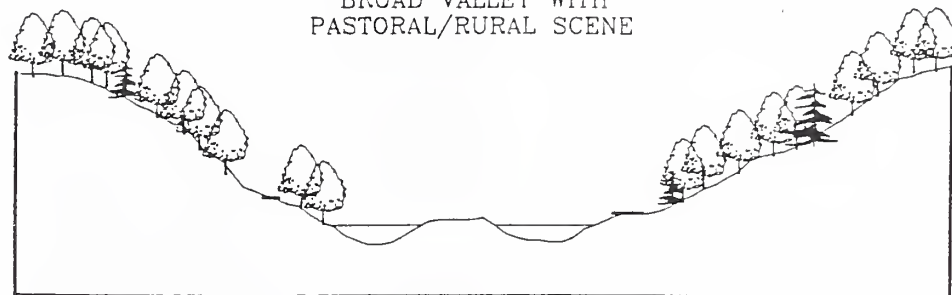


PLAN



SECTION

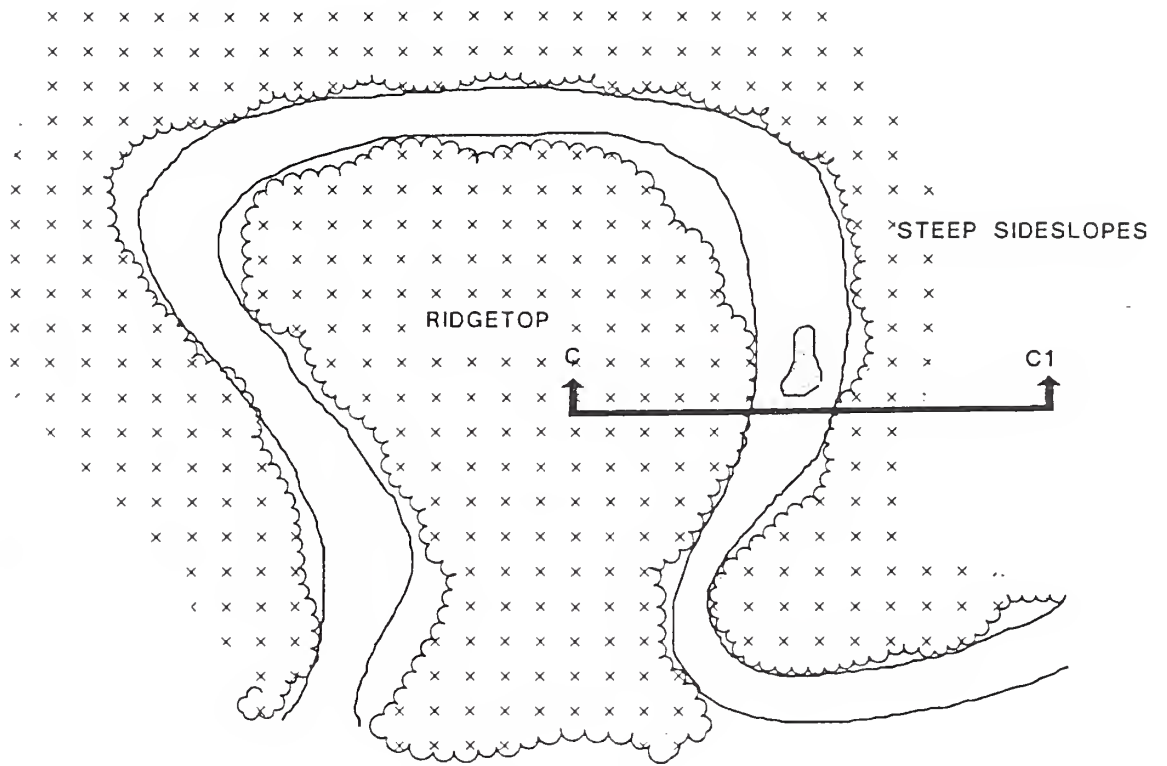
BROAD VALLEY WITH
PASTORAL/RURAL SCENE



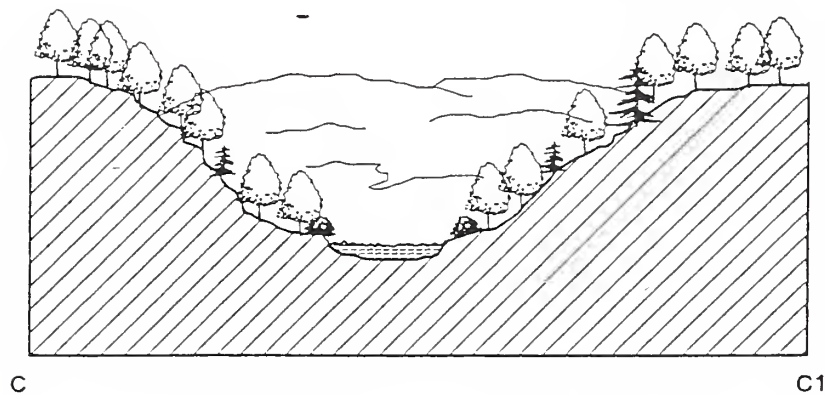
SECTION

NARROW VALLEY WITH
NATURAL APPEARING ISLANDS

FIGURE B



PLAN



SECTION

NARROW SHARPLY WINDING VALLEY
WITH STEEP SIDESLOPES.

Islands in the designated river corridor are essentially undeveloped except for a few private cabins and one commercial operation. They are characterized by river bottom forest, containing many ages and sizes of trees, including virgin stands with specimens over four feet in diameter. Dense, herbaceous undergrowth, tall ferns and savannah, as well as a few openings from past agricultural uses are also found.

WILDLIFE HABITAT

Wildlife habitat in the Allegheny River corridor can be divided into two broad habitat types: 1) the riparian/wetland habitat that occurs immediately adjacent to the river and its tributaries; and 2) the upland forested habitat that occurs mainly on the steep side slopes of the river valley. At least 64 species of mammals, birds, reptiles, and amphibians are associated with the riparian/wetland habitat type during the breeding season. As many as 82 wildlife species utilize the mature upland forest habitat during the breeding season.



Riparian/Wetland Community - The quality of the riparian/wetland habitat along the upper river has been adversely impacted by a long history of residential development and by various amounts of access (roads and railroads). Associated with this development is a network of roads and railroad grades which have altered water regimes, influencing the vegetation in the riparian/wetland habitat and displacing some wildlife species. Some of the least disturbed and highest quality riparian/wetland habitat occurs on the islands.

Development decreases dramatically down river from US62 at Hunter Station to Emlenton. Higher quality habitat for wildlife species that are sensitive to human disturbance such as ospreys, bald eagles, and great blue herons exists downstream of the US62 bridge.

Several large tributaries empty into the Allegheny River creating wetlands and broader flood plains than found throughout most of the river corridor. Because these areas were some of the first places where people settled and communities are still found here, the riparian/wetland habitat that once existed has been highly modified and provides poor habitat for many wetland/riparian species.

A few flood plains where tributaries empty into the Allegheny River are relatively undeveloped. Intact, high quality riparian/wetland habitat at these confluences plus numerous smaller streams provides habitat for furbearers such as mink and muskrats, waterfowl such as wood ducks and common mergansers, shore birds such as great blue herons and green herons, and a variety of turtles, frogs, and salamanders.

Upland Forest Habitat - The river shoreline is fragmented. A large part of the corridor consists of continuous canopy mature hardwood forest. The steep valley side slopes have hindered extensive development, providing large tracts of relatively unfragmented forest. Some of these large tracts are in public ownership including the National Forest lands, State Game Lands #86, and Creek State Forest.

These tracts provide quality habitat for game species and nesting habitat for species sensitive to human disturbance and large cavity-nesting species. Small nesting colonies of great blue herons are often found on these relatively isolated forested areas.

Management Indicator Species - The management indicator species approach is used by the Forest Service to reduce the complexity of discussing all the wildlife species in the river corridor. Assemblages or groups of wildlife associated with vegetative communities or key habitat components have been identified and selected as management indicators. These assemblages were chosen because: 1) they

represent the vegetation types, seral stages and special habitat elements necessary to provide for all wildlife species in the area, and 2) population changes may indicate effects of management activities on other wildlife populations.

Habitat for the following management indicator species found in the river corridor will be monitored: American Woodcock, Ruffed Grouse, White-tailed deer, Rattlesnake, Red-shouldered Hawk, Yellow-bellied sapsucker, Pileated Woodpecker, Magnolia Warbler, Hermit thrush, Black-throated Green Warbler, Great Blue Heron, Barred Owl, Beaver.

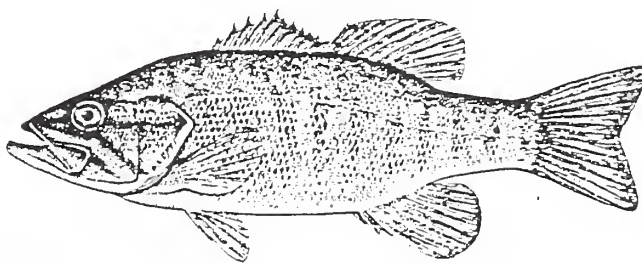
AQUATIC HABITAT

The Allegheny River is one of the most biologically diverse rivers in the State of Pennsylvania. Part of the reason is the diverse freshwater mussel population. A 1989 survey (Western Pennsylvania Conservancy and Academy of Natural Science of Philadelphia 1989) documented sixteen species, two of which are currently listed as federally endangered.

Habitat for a variety of fish species is provided throughout the river corridor. The river consists of a sand and gravel substrate, with patchy areas of large boulders along streambanks. The substrate composition is a result of glacial outwash. Riffles and pools are the dominant habitat characteristics. At the south end of the corridor, upstream of Emlenton, the river flows through a narrow gorge, thus constricting the channel and creating longer deep-water areas.

The most recent comprehensive survey of the Allegheny River fisheries occurred from 1969-1975 (Lee, 1975). During the survey, 69 species of fish were documented between Kinzua Dam and Franklin. This wide variety of fish species, included several game fish such as large- and smallmouth bass, black and white crappie, yellow perch, bluegill, muskellunge, walleye, northern pike, white bass, channel and flathead catfish, and brown, brook, and rainbow trout. There were also many non-game fishes, including species of chubs, darters, shiners, and suckers. Other species have been documented since the comprehensive survey, bringing the total to over 70 species.

Several state- and federally-listed darters have been documented as inhabiting the river, as well as the burbot and smallmouth buffalo (see section on Threatened, Endangered, and Sensitive species for more discussion on these species this page). These occurrences were documented in the 1960s and 1970s, but no comprehensive survey of the river has been undertaken since 1974 (Lee, 1975) to determine the status of many of these species.



SMALLMOUTH BASS

River habitat characteristics were being altered by dredging operations until 1972. These operations, occurring at five sites within the corridor, were removing shallow, productive riffle habitat, and creating large deep pools with sudden drop-offs and flat bottoms, providing little variation or cover (Lee, 1975). Dredging operations no longer occur within the river channel as a result of the impacts these operations were having on fisheries habitat.

As mentioned in the water quality section of this chapter (page 14), the area between Kinzua Dam and Warren has changed from what was historically a warm water fishery to one that now supports a cool and cold water fishery. As a result, a trout fishery has been established. Rainbow and brown trout fingerlings are stocked annually between the Dam and Brown Run by the Pennsylvania Fish and Boat Commission. Within the tailwater section of the Dam and downstream towards Warren, smallmouth bass, as well as rockbass, bluegill and white crappie, have seen noticeable declines because of the water temperature changes (Griffiths, 1985).

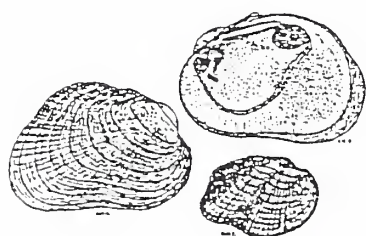
Throughout the river corridor, the Pennsylvania Fish and Boat Commission stocks walleye fry annually, muskellunge on alternating years, and occasionally channel catfish (Lee, 1994).

Downstream of the river corridor between the Clarion River and Ohio River, water pollution had a major impact on the fisheries. These problems were a result of acid mine drainage and limited fish distribution in this 150 mile section of river. In the early 1970s, clean-up efforts resulted in improved water quality conditions. Today, several species of fish have moved back into the river corridor, including sauger, freshwater drum, and smallmouth buffalo, indicating that the river downstream of the corridor has improved water quality (Lee, 1994).

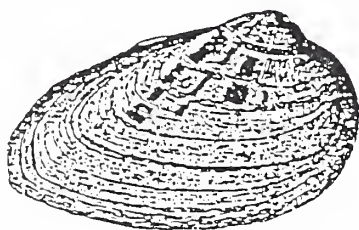
Management Indicator Species - Habitat for Brook Trout and Walleye will be monitored because population changes may indicate effects of management activities on other fish populations.

THREATENED, ENDANGERED, REGIONALLY SENSITIVE, AND STATE SPECIES OF SPECIAL CONCERN

A biological evaluation has been completed which addresses habitat and potential impacts for Federally-listed threatened and endangered species and Regionally sensitive species (Appendix K).



Northern Riffleshell



Clubshell

Federally-Endangered Mussels found in the Allegheny River

The following State-listed Species of Special Concern have been documented in the river:

Pennsylvania Endangered - Osprey, Autumn Willow, Flat-stemmed Spike Rush, Small Yellow Lady's Slipper, Spotted Darter, Tippecanoe Darter, Gravel Chub, Longhead Darter, Red-head Pondweed

Pennsylvania Threatened - Allegheny Woodrat, Ohio Lamprey, Mountain Brook, Lamprey, Bluebreast Darter, Channel Darter, Gilt Darter, Bicknell's Hoary Rockrose, Stalked Bulrush

Pennsylvania Rare - Lupine, Thread Rush, Puttyroot, Few Flowered Nutrush

Pennsylvania Tentatively Undetermined - Rock Skull Cap, Wild Pea, American Columbo, Ohio Spiderwort, Illinois Pondweed, Oblique Milkvine (PA Department of Natural Resources. 1994. Pennsylvania Natural Diversity Index)

SOCIAL ENVIRONMENT

HERITAGE RESOURCES

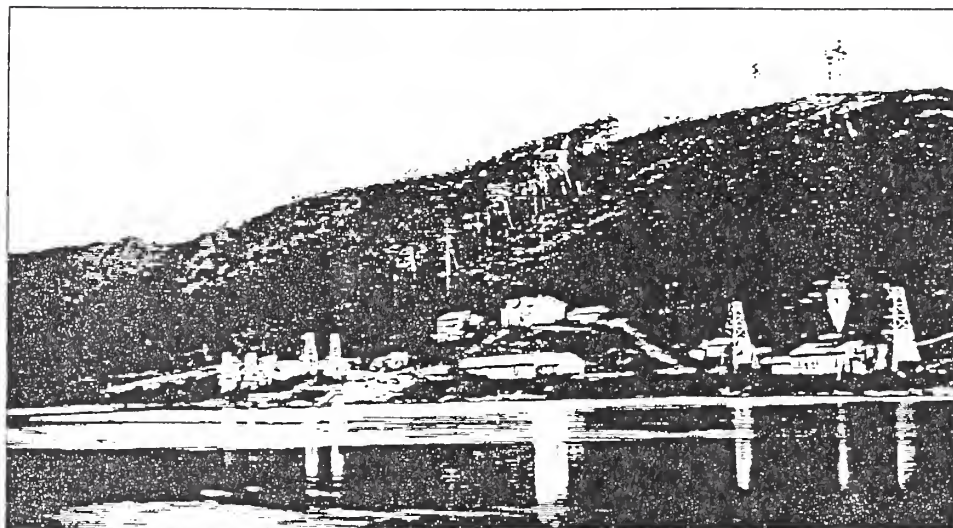
The area in and around the designated river segments has much prehistoric and historic significance, with the earliest archaeological evidence suggesting that Native American peoples entered the Allegheny River corridor around 8,000 to 12,000 B.C.

Late eighteenth and early nineteenth Euro-American settlement focused on the rich timber resources and until the discovery of oil, the logging industry was the most important industry of the region. Beginning in 1859 and lasting throughout most of the remainder of the nineteenth century, most of the world's oil production was centered in this region. Before the discovery of oil, the discovery of commercial grade iron ore in the area in 1824 led to the construction of twenty-three iron furnaces in Venango County, several of which are located in the southern part of the corridor.

Only a few areas within the Allegheny River corridor have been the subject of a complete heritage resources survey. What is presently known about the heritage resources of the corridor is mainly based on informal fieldwork

conducted by various professional and amateur archaeologists over the years for a variety of reasons.

Some 135 heritage resource sites have been identified and recorded within the designated segments of the river. The heritage resources in the corridor include archaeological sites and historic districts, buildings, structures, and objects on record with the Pennsylvania Historical and Museum Commission, the Carnegie Museum of Natural History, the Allegheny National Forest, and the National Register of Historic Places.



The Economy Oil Company, owned by a millennial religious society, in 1864. It was one of the more successful Tidioute operations during the industry's first decade. DWM

One prehistoric site called "Indian God Rock" is listed on the National Register of Historic Places. There are a number of the other recorded prehistoric sites that are potentially eligible for inclusion on the National Register. National Register historic properties within the Allegheny River corridor include the Allegheny Hotel, the Tidioute Historic District, the West Hickory Bridge, and the Rockland Iron Furnace.

LAND USE, OWNERSHIP AND DEVELOPMENT

About 28 percent of the land in the designated river corridor is in public ownership (federal, state or local). Federal lands are managed by the USDA Forest Service (Allegheny National Forest), the U.S. Army Corps of Engineers (Kinzua Dam and boat access), and the U.S. Fish and Wildlife Service (Allegheny National Fish Hatchery). State lands are managed by the

Pennsylvania Fish and Boat Commission, Pennsylvania Game Commission or the Pennsylvania Department of Conservation and Natural Resources (Bureau of Forestry).

The majority of federally-administered lands within the designated corridor fall under a management area (MA) 6.1 designation. Under MA 6.1, emphasis is placed on managing such land for semi-primitive, motorized dispersed recreation opportunities and wildlife species such as turkey and bear and cavity-nesting birds and mammals. Most roads are restricted - only open seasonally.

Other Forest Service-administered Management Areas are: the Allegheny Island Wilderness with an MA 5 designation and an emphasis on providing a natural ecosystem in a Congressionally-designated Wilderness; National Recreation Area with an MA 6.4 designation; Buckaloons campground with an MA 7 designation (high density recreation developments); and the Buckaloons Historic District with an MA 8 designation (special uses).

Portions of Pennsylvania's State Game Lands #47. 86 and 309 are located within the designated river corridor. These lands are managed primarily for the production of wildlife and hunting opportunities. Timber and land management activities which benefit wildlife may occur. Anders Run Natural Area and Clear Creek State Forest are the Bureau of Forestry-managed lands in the designated river corridor. The State Forest management goal is to manage State Forests under sound ecosystem management, to retain their wild character and maintain biological diversity while providing pure water, opportunities for low density recreation, habitats for forest plants and animals, sustained yields of quality timber, and environmentally sound utilization of mineral resources (Lemery, 1995). Pennsylvania Fish and Boat Commission manages river access sites and the fish hatchery in Tionesta.

A small amount of land within the designated river corridor is owned by counties, townships and boroughs. This land is primarily managed for various administrative and recreational purposes.

With the majority of land in the designated river corridor in private ownership, a variety of land uses occur. Such uses include residential year-round and seasonal dwellings and commercial development, large tracts of land for timber productions, mineral production, agriculture and other open, undeveloped lands (river flood plains, vacant fields, pastures, etc.).

Development within the designated river corridor within the Allegheny National Forest includes a developed campground and boat access at Buckaloons, a small pull-off at the start of the Tanbark Trail (along US 62 within the Allegheny National Recreation Area), and a developed scenic overlook site above Tidioute. There is no development on either State Game Lands #47, 86 or 309 except for hunter parking areas. Development at Clear Creek State Forest consists of a primitive campsite designed as a stop-over for float trips and hikes, with a mulching toilet as the only improvement. Access is either by boat or the 20.5-mile hiking trail system (most of which is within the corridor).

Nine developed boat access sites currently exist within the corridor.

Approximately 72 percent of the land within the river corridor is in private ownership, with many recorded deeds showing that ownership is split between the surface and the subsurface. There are about 2,000 residences located in the designated river corridor. About half of these



are seasonal cottages, used only during the summer, weekends or hunting season. The rest are occupied year-round.

There is scattered oil and gas development throughout the river corridor.

Except for the Allegheny River Hotel, there is no industrial or commercial development in the Kinzua Dam to Warren river segment. There is a federal fish hatchery (U.S. Fish and Wildlife Service) at Kinzua Dam. Between Buckaloons and Tionesta, the most developed portion of the river, approximately 50 businesses exist. About half are associated with the recreation/tourist trade. Others businesses include a sand and gravel operation, an earth-moving contractor, sawmills, an engineering firm, etc. The remaining businesses include a full range of small town service businesses. There are also several Pennsylvania Department of Transportation maintenance yards in this section of the corridor.

The Tionesta to Oil City segment, is the second most developed segment. Tionesta has a courthouse and other such offices associated with a county seat. There is also a State fish hatchery in Tionesta. A few tourist businesses, including a golf course, are also located south of Tionesta on U.S. 62. There are also several private campgrounds.

Between Franklin and Emlenton, the river is notable for its lack of industrial and commercial development. Exceptions are an industrially zoned area (also an Enterprise Zone, which is a State-approved program providing financial incentives to encourage industrial growth), just below Franklin (at the beginning of this segment, including a brine treatment plant, auto dealership and a township gravel pit), the newly constructed Scrubgrass Power Plant and an industrial development site adjacent to the power plant in Scrubgrass Township are exceptions. Additional development at the Scrubgrass industrial site is anticipated (Wingate, November, 1995). The village of Kennerdell has several businesses, most of which are tourist-oriented.

The Western Pennsylvania Conservancy currently owns two parcels of land plus an

island within the river corridor: an 11,300-acre tract in President Township and a 201-acre tract at the confluence of Sandy Creek and the Allegheny River. The Conservancy purchased the larger tract with the expressed intent of selling it to the Commonwealth of Pennsylvania to be added to State Game Lands #47 and managed by the Pennsylvania Game Commission.

There are two rails-to-trails access sites within the river corridor, one in Tidioute and one in Cranberry Township. The Tidioute Trail has no developed parking area. The Cranberry Township site includes a developed parking area, a physical fitness course and an historic building to be developed as an information center.

ZONING

Three counties and twenty-five municipalities have jurisdiction within the river corridor.

Warren County has both a Subdivision and Land Development Ordinance and a County Zoning Ordinance; however, Warren County's zoning ordinance predates the 1968 Pennsylvania Municipalities Planning Code. Townships, therefore, are not bound by county zoning unless they choose to adopt such zoning. Townships along the river which have adopted the county zoning ordinance are Mead, Glade and Pleasant Townships and Tidioute Borough.

Forest County has a Subdivision and Land Development Ordinance which is implemented in all municipalities in the county with the exception of Hickory Township, which has its own Subdivision and Land Development Ordinance. There are no county-wide zoning regulations.

Venango County has a Subdivision and Land Development Ordinance but no county-wide zoning. Three of the nine townships bordering the river in Venango County, Cranberry, Cornplanter and Sandy Creek Townships, have local zoning ordinances in effect (see Table II-2, page 24.

RIVER ISLANDS

There are approximately 131 islands within the designated segments of the river, some of which are almost 100 acres in size. Some are private, seven comprise the Allegheny Islands Wilderness (USFS), and some are owned by the Commonwealth of Pennsylvania, and by Venango County. Other than a sand and gravel operation on one of the islands in Tionesta and a few private cabins on others, the islands are essentially undeveloped. Some dispersed camping and day use is occurring on the islands.

INFRASTRUCTURE

Roads - The upper section of the Allegheny River (above Tionesta) is characterized by a system of parallel roads along both sides. The lower section of the river has few parallel roads. Where they are parallel, they only follow the river for short distances often along old railroad grades. Most roads descend from ridgetops through valleys to the small river communities.

Based on the existing transportation system, there are several entry points to the river corridor. The major entry points are at Emlenton via Interstate 80, at Franklin via US62, US322 and SR8, and at Buckaloons via US6 and US62. There are also several minor entry points at Oil City, Tionesta, Warren and Kinzua Dam.

Bridges - Seven highway bridge crossings occur within the designated river segments. Bridge locations are: Glade, US6 Business at Warren; US62 at Buckaloons, Tionesta and Hunter Station; SR127 at Tidioute and West Hickory; and SR11009 at Kennerdell. Three bridges (West Hickory, Hunter Station and Kennerdell) are currently being studied by Pennsylvania Department of Transportation for replacement within the next five years. The bridge at West Hickory is listed on the National Register of Historic Places.

Access Sites - Table II-3, on page 23, lists the access sites within the river corridor. See also Map 3, on page 25.

Trails - Rails-to-trails, hiking and biking trails are located within the designated river corridor. Trails include: The Anders Run Natural Area Trail, Tanbark Trail, Tidioute Riverside Rec Trek Trail, Allegheny River Trail, and the Clear Creek Trail System.



Many trails are located on abandoned railroad grade along or near the river banks. Except for the developed trail sections, most of the abandoned grades in the south half of the corridor are being used by motor vehicles for access to private camps, access to the river banks and for recreational riding.

Other - Scattered powerline and gas pipeline crossings occur along the corridor.

NOISE

Noise is prevalent in the river corridor from Kinzua Dam to just south of Tionesta. Where roads run closely parallel to the river, noise from vehicular traffic (especially large trucks) can be intrusive. Between Buckaloons and Tionesta, river users can avoid some of the highway noise by traversing the river on the western side of the islands.

All along the river, noise is created from motorized boats used for recreation activities.

Noise from unauthorized ATV use in the corridor and recreationists on the river sometimes create conflicts with private landowners.

LAW AND REGULATORY ENFORCEMENT

Area law enforcement units are so limited that police seldom visit remote areas on a routine basis because of higher priority demands in the more populated areas. Due to limited access and greater remoteness of the river corridor in Venango County, law enforcement issues are more significant than in the northern section.

Several remote but popular recreation sites on private land along the southern river corridor have been the scene of recent serious criminal activities. Indiscriminate and illegal ATV and other off-road vehicle use along the southern corridor is often cited as a significant problem. Other less serious, but no less important, problems along the entire corridor include littering, illegal dump sites and private land trespass.

Warren, Tidioute, Tionesta, Oil City, Franklin and Emlenton provide law enforcement within their incorporated limits but not in the outlying rural areas. The Warren County Sheriff's Department has a cooperative agreement with the Allegheny National Forest to provide patrols on certain National Forest areas in Warren and McKean Counties and does patrol other rural areas in Warren County including portions of the river corridor.

Neither the Forest County nor the Venango County Sheriff Departments carry out routine patrols. Primary police protection in the corridor areas outside of cities and boroughs in these counties is the responsibility of the Pennsylvania State Police.

There is no township level police protection within the river corridor.

Pennsylvania Game Commission Wildlife Conservation Officers (WCO) have full police powers in addition to authority to enforce fish, game and other laws protecting natural resources. It is policy that WCO's exercise full authority within their line of duty. Deputy

TABLE II - 2
EXISTING ZONING ORDINANCES WITHIN THE PROPOSED RIVER CORRIDOR

	SETBACKS	LOT SIZE	STEEP SLOPES	BUILDING HEIGHT	SIGNING	RECREATION DEVELOPMENT
Cranberry Twp. (Agriculture/ Conservation)	* 50' front * 50' rear	* 2 acres * 200' lot width			* up to 300 sq ft	* minimum 5 acres for transient trailer camping
Complanter Twp. (Conservation) (R-1 Oleopolis)	* 40' front * 50' rear	* (C)* 2 acres; 200' lot width * (R-1)** 1 acre; 150' lot width	* engineering plan if over 15%	* (C) 45' * (R-1) 35'	* up to 300 sq ft	* prohibits camp/cottage construction from unsuitable materials (i.e., busses, freighters & transient trailers)
Sandy Creek Twp. (Conservation)	* 50' front * 50' rear	* 1.5 acres * 200' lot width	* engineering plan if over 15%	* 55'		
Venango County Subdivision & Land Development Plan		* 1/2 acre * 125' minimum width				* 5 acres for recreational vehicle park
Warren County adopted by: Mead, Glade, Pleasant Twps., Tidioute Borough (Agriculture/ Conservation/ Recreation (ARC) Districts)	* 50' front * 50' rear	* 40,000 sq ft minimum * (R-1) 20,000 sq ft (no public water or sewer)		* front, side yards must increase as height exceeds 30'	* up to 32 sq ft * 96 sq ft for community sign	* 5 acres for resort development

* C = Conservation District
** R-1 = Residential District

TABLE II - 3
EXISTING ACCESS SITES

RIVER MILE*	SITE	boat ramp	parking	trail access	drinking water	toilet	picnic tables	trail	camping	ADMIN BY**
197-153	<i>Kinzua Dam to Tionesta - ROS Class Rural</i>									
197	Kinzua Dam	X	X		X	X	X	X		COE
184	Starbrick (outside corridor)	X	X							PFBC
181	Buckaloons /a	X	X		X	X	X		X	FS
176	Tanbark Trail		/b					X		FS
169	Bonnie Brea	X	X							PFBC
167	Tidioute Overlook		X			X	X			FS
167	Tidioute /c	X	X			X	X			Boro
167	Tidioute		/b					X		Boro
158	West Hickory	X	X							PFBC
153	Tionesta	X	X							PFBC
153-90	<i>Tionesta to Emlenton - ROS Class Roaded Natural</i>									
153	Tionesta	X	X							PFBC
130	Oil City (outside corridor)	X	X							PFBC
123	Franklin (outside corridor)	X	X							PFBC
122	Cranberry Twp.	/d	X	X		X		X		AVTA
112	Fisherman's Cove	X	X							PFBC
109	Clear Creek State Forest	X		X		X			X	BOF
109	Kennerdell Overlook		X							PVT
108	Kennerdell	X	X							PVT

* RIVER MILE = the miles from the confluence of the Allegheny and Ohio Rivers.

**ADMINISTERED BY:

COE = US Army Corps of Engineers

FS = USDA Forest Allegheny National Forest

AVTA = Allegheny Valley Trails Association

PVT = private

PFBC = Pennsylvania Fish and Boat Commission

Boro = Borough of Tidioute

BOF = Pennsylvania Bureau of Forestry

/a lights; phone

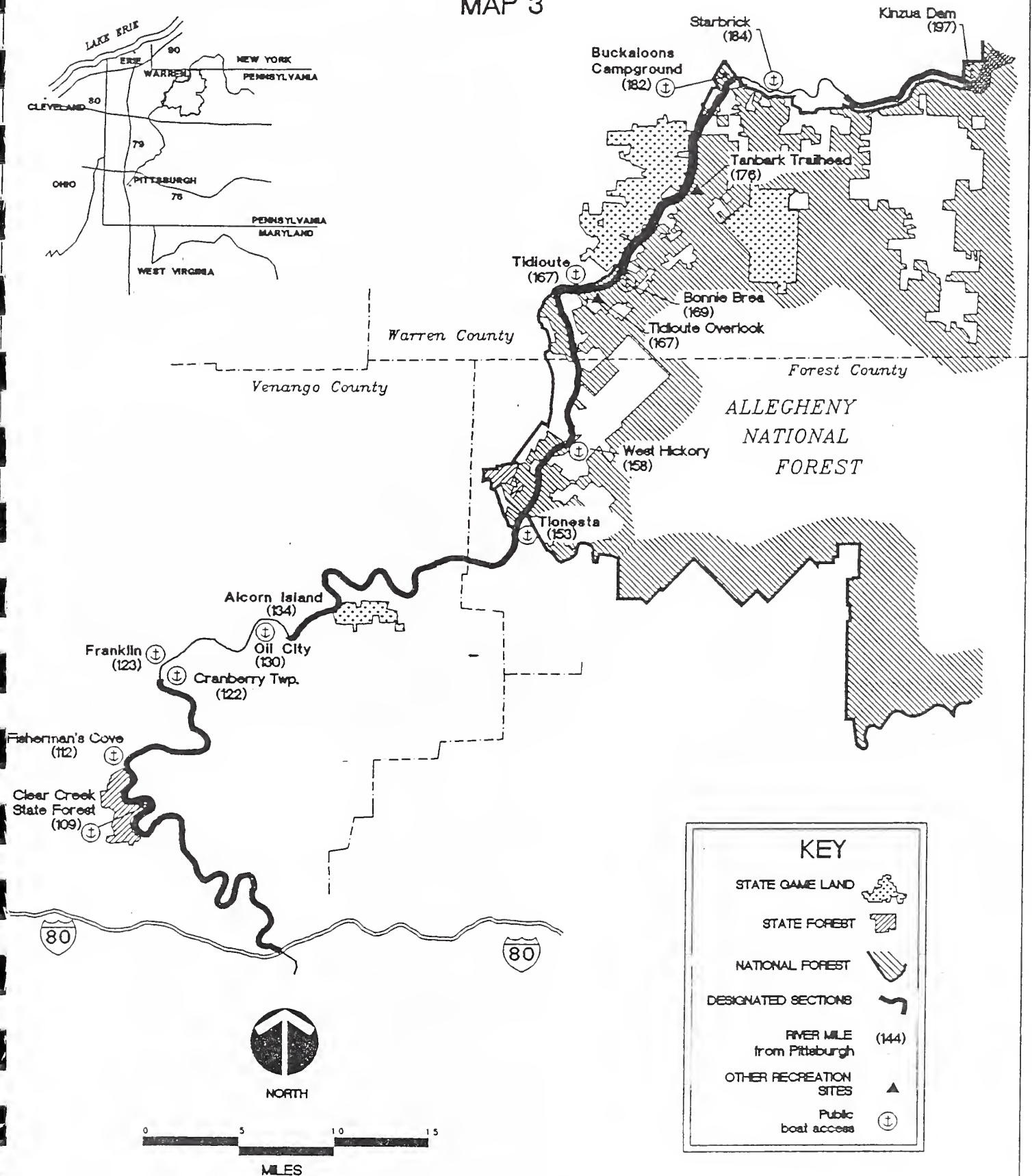
/b parking very poor

/c lights; phone, stores, vending machines 2 blocks away in town

/d canoe access only

EXISTING CONDITIONS RECREATION SITE LOCATION MAP ALLEGHENY NATIONAL WILD & SCENIC RIVER

MAP 3



WCO's have powers limited to enforcement of game and wildlife codes, fish and boat codes and environmental laws.

Enforcement of Fishing and Boating Regulations is the primary responsibility of waterways conservation officers with the Pennsylvania Fish and Boat Commission. Waterways Conservation Officers have limited police powers. Department of Conservation and Natural Resources - Bureau of Forestry officers have police powers to enforce rules and regulations on State Forest Lands.

USDA Forest Service Law Enforcement Officers have authority to enforce federal laws and regulations on National Forest System lands and public waters administered by the agency, including the Allegheny Wild and Scenic River. However there are few federal laws which apply to the public waters of the Allegheny.

The U.S. Army Corps of Engineers has jurisdiction at Kinzua Dam and boat access.

RECREATION

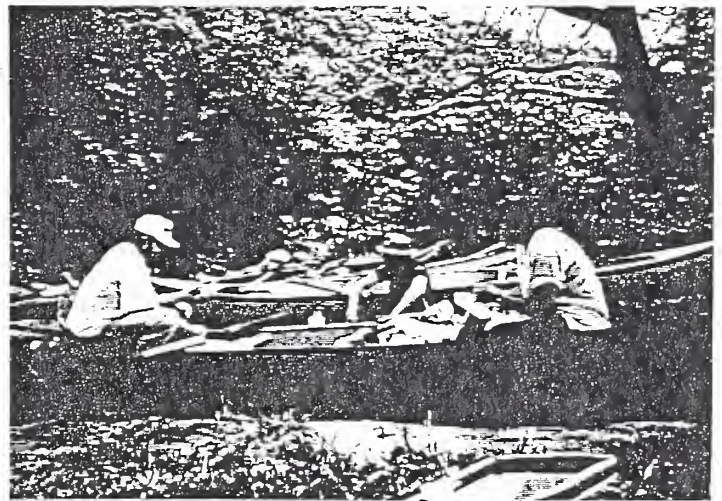
The Allegheny River provides different recreation settings and experiences as well as a variety of recreation activities.

Based on the landscape characteristics and current levels of access and development, the experience of the river user is substantially different on the upper and lower sections of the river. The upper section from Kinzua Dam to Tionesta is characterized as a Rural Recreation Opportunity Spectrum (ROS) class. (For a detailed description of the ROS classification System see Appendix B - Glossary.) There are many residences, camps, small towns, parallel roads and access points. Except for the island landscapes, many people and human activities can be seen or heard from the river.

The lower river from Tionesta to Emlenton has the characteristics of a Roaded Natural ROS Class. Here, there are only occasional nodes of development and occasional small communities. Between them, the river remains largely undeveloped and natural. Access is provided but is limited compared to the upper river. Roads come to the river at certain points but only parallel it for short distances.

The major recreation activities along the river are boating, canoeing, boat fishing, shore fishing and swimming. Walking and biking are popular in those sections with completed rail-trails. Much of this activity is generated by the residents of the 2,000 plus seasonal cottages and year-round homes along the river. The remainder of activity is provided by visitors to the 11 public access sites along the river.

Other river-related activities occurring within the corridor include driving for pleasure, viewing scenery, bird watching, hunting, photography, hiking, biking, picnicking, etc. The Kinzua Dam, Buckaloons, Tidioute and Clear Creek State Forest sites provide additional facilities for picnicking, viewing scenery and/or camping. Activities (such as hunting, bird watching, etc.) which take place outside of a developed site are called "dispersed".



Several hiking trails are located within and around the river corridor. A variety of commercial recreation facilities and services also exists along the river from canoe outfitters and boat rentals to campgrounds, restaurants, and bed and breakfast inns.

Of the existing recreation sites the majority provide only limited facilities and services, including the necessities of parking and location signing.

The upper section of river (37.6 miles from Kinzua Dam to Tionesta) has more recreation use than the lower section due to better access and more seasonal homes and residences, as well as

proximity to other recreation facilities on the Allegheny National Forest. Six public access sites within and one outside the designated corridor combine with the road systems to provide considerable access for private camp development, shore fishing, canoeing and swimming.



The lower section of river (Tionesta to Emlenton, 49 miles) has a moderate level of recreation use compared to the upper river because of limited access, fewer communities and seasonal home developments, and the general undeveloped character of the river. With only one private and two publicly owned access sites within the corridor and two public access sites outside the corridor (between Oil City and Franklin), access to the lower 49 miles of river is quite limited. Fishing, power boating, canoeing and swimming are popular activities.



MANAGEMENT

MANAGEMENT OBJECTIVES

The following objectives for management of the river were developed from public comment and from recommendations of the Northern and Southern Advisory Councils:

1. Protect, enhance and interpret outstanding river values, including scenic quality, cultural and historic resources, and the natural biological diversity of the river corridor.
2. Promote the recreational use of the river while maintaining its present free-flowing character and high quality fishery.
3. Minimize conflicts between river use and private landowners.
4. Coordinate the activities and responsibilities of Federal, State and Municipal regulatory and managerial agencies to carry out the Management Plan. See Appendix E for a full list of these agencies.



DESIRED CONDITIONS

The desired condition is a description of what the physical condition of the area will eventually be under the proposed management.

Riparian Zone

Present and future emphasis will be to enhance, sustain, maintain, and, where needed, restore riparian areas for their values, functions, and processes over a wide variety of landscapes for future generations. The health of the river corridor depends upon working riparian functions and processes the over entire length of the river and on the tributaries within the river corridor. This future depends upon meeting the needs of society to use these areas or to be in close proximity to them.

Water

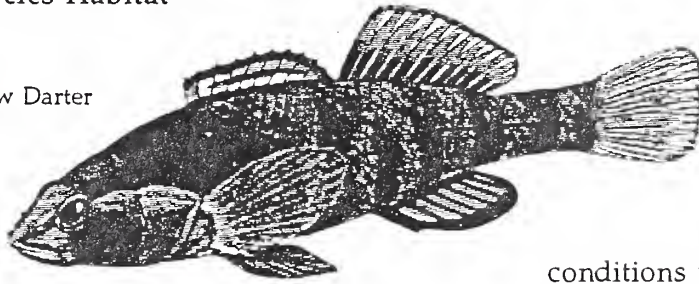
The desired condition for water quality of the Allegheny River is a level that meets the identified beneficial uses the river provides, as defined by DER (1994). The beneficial uses include: 1) aquatic life - warm water fishes; 2) water supply - for drinking, industrial uses, livestock, wildlife, and irrigation; and 3) recreation - boating, fishing, water contact sports, and aesthetics. In addition, the desired condition for water quality is management for the conservation and protection of all native aquatic species indigenous to the Allegheny River.

The desired condition for water quality of tributaries is a level that supports designated beneficial uses, and that also does not cause a deterioration of water quality in the Allegheny River.

The river, within the designated sections, will remain in a free-flowing condition as required in the Wild and Scenic Rivers Act.

Fish, Wildlife, and Threatened, Endangered, and Sensitive Species Habitat

Rainbow Darter



Fish Habitat

The desired condition for aquatic ecosystems is a diverse habitat for maintaining aquatic biodiversity. This includes sufficient amounts and sizes of large woody debris assemblages in streams to provide habitat complexity and diversity, mainly in the tributaries. Because the Allegheny River is a large system, it is difficult to accumulate assemblages of large woody debris. Adequate distribution of fish habitat features, such as pool, glides, and riffles, are present for cover, rearing, feeding, and refuge areas.

Depending on the beneficial uses identified by DER (1994) for each stream in the corridor, water temperature regimes will be managed for either cold water fishes or warm water fishes.

The desired condition for sedimentation of streams is a rate that is in equilibrium with the watershed, and does not cause detrimental effects to the aquatic communities, as well as individual species and their habitats.

Wildlife Habitat

The desired condition for wildlife habitat is a mosaic of diverse habitats capable of sustaining a rich, productive, and diverse flora and fauna. Unique habitats such as riparian areas, wetlands, springs, and seeps would be managed to sustain their diversity and productivity. Special habitat features such as raptor nests and heron rookeries would be maintained.

Threatened, Endangered and Sensitive Species Habitat

The desired condition for threatened, endangered, and sensitive species habitat is similar to the wildlife and fish habitat desired

conditions with emphasis on sustaining the unique habitats where these rare plants and animals occur.

Vegetation

The desired condition for vegetation is a variety of both forested and non-forested communities. Forested communities would contain a diversity of trees, shrubs, and herbaceous species. Non-forested areas such as agricultural and residential areas would include fields, pastures, and lawns with shrubbery and trees. The islands would contain a high diversity of vegetative species associated with riparian and riverine systems. Rare species such as butternut would be protected..

Recreation

The Wild and Scenic Rivers Act states that the river and its immediate environment must be protected for the benefit and enjoyment of present and future generations. The immediate environment is identified by boundaries located at the upper and lower ends of each designated segment, terminal boundaries, and the boundaries drawn roughly parallel to the river, landward or lateral boundaries. Congress designated the recreational classification for all segments of the river; therefore, no segment is classified as scenic or wild.

The boundary encompasses those land and water areas necessary to meet the objectives of the Allegheny River legislation and the National Wild and Scenic Rivers Act. The intent of the boundary under the Act is to identify the area to be conserved in order to protect the free-flowing condition and "outstandingly" remarkable resources of the river and its immediate environment. The boundary will protect the river and its immediate environment to the

extent that the Local Land Management and Zoning Guidelines (see Appendix H) are integrated into local laws, plans and other activities and ordinances are developed and enforced along with relevant county, state and federal laws.

The upper and lower boundaries of each segment are those listed in the Allegheny legislation [P.L. 102-271, 1992].

The landward boundaries were identified through the inventory and analysis of various river and valley-related natural, physical and cultural resources. These areas are the land resources which are most important to the river. See Appendix C for maps of the corridor boundaries.

Using the ROS classification system (see section page 27), the three segments of the Allegheny River have been placed into two different ROS classes, both of these still have the recreational river classification. The upper section extends from Kinzua Dam to Tionesta and has a "Rural" ROS classification. The lower segment extends from Tionesta to Emlenton, and has a "Roaded Natural" ROS classification.

Upper Section - Kinzua Dam to Tionesta - Rural ROS Classification

The areas within this section have substantially modified landscapes, which have both human-made and natural features. Evidence of human development is prevalent. There is easy access to the river, with parallel roads, bridges and utility lines. Regular vehicle use is consistent and may be seen from the river. Motorized and non-motorized boating is a consistent use.

This section of the river corridor has areas characterized by a combination of soft ground cover (grass and forest) and hard surface paving, storm drainage and natural drainage, and a wide range of land uses including residential, commercial, industrial, agricultural and timber related. A stream corridor management strategy for this upper segment of the river should include and capitalize on the opportunities to maintain and re-establish the riparian forest buffer.

The buffering and filtering capacity of the stream corridor should be maintained to protect the water quality from adverse impacts of activities within the river corridor. A forested buffer should be maintained to screen new developments within the corridor. Consideration should also be given to preserving historical sites and cultural values within the river corridor.

It is expected that current compatible uses will continue within this section of the corridor. New construction and development to be planned in such a way as to maintain the current rural character of the river and to protect the values for which the river was designated. This can best be accomplished on private property through the use of land management planning, voluntary application of river management guidelines, enactment and enforcement of local land use/management regulations and the awareness/enforcement of existing federal, state and local laws and regulations.

Developments such as recreation facilities, roads, and trails will harmonize with the area's current character. Recreation facilities will be designed to limit the user's impact on the environment and may contain on-site controls. When wildlife habitat is maintained through vegetative management, it is accomplished in a manner that blends in with the river's natural appearance and is not readily evident from the river.



Lower Section - Tionesta to Emlenton - Roaded Natural ROS Classification

Alterations to the landscape in this section of the river tend to be subtle, and natural characteristics remain dominant. There are small nodes of rural and urban development, and roads rarely parallel the river, limiting access to the river. There are developed access sites, some vehicle use is consistent with the Roaded Natural ROS classification and may be seen from the river. Motorized and non-motorized boat use is appropriate.

Cultivated land and natural vegetation with little hard paving typify this segment of the river. Recreation is the prevalent use in this segment, with the exception of resource-oriented industries such as logging and oil, gas and mineral extraction. A primary emphasis for management of this part of the river corridor should be for the preservation of open space values for which the river was designated. The buffering and filtering capacity of the stream corridor should be maintained to protect the water quality from adverse impacts of activities within the river corridor.

It is expected that current compatible uses will continue within this section of the corridor. New construction and development are expected to be planned in such a way as to maintain the current Roaded Natural character of the river and to protect the values for which the river was designated. This can best be accomplished on private property through the use of land management planning, voluntary application of river management guidelines, enactment and enforcement of local land use/management regulations and the enforcement of existing federal, state and local laws and regulations.

Developments such as recreation facilities, roads, and trails will harmonize with the area's current character. Recreation facilities will be designed to limit the user's impact on the environment and may contain on-site controls. When wildlife habitat is maintained through vegetative management, it is accomplished in a manner that blends in

with the river's natural appearance and is not readily evident from the river.

Heritage Resources

The desired condition for heritage resources within the designated river corridor is for the managing agencies to work in cooperation with the Pennsylvania Historical and Museum Commission, local governments, Indian Tribes, private organizations, and private individuals to foster conditions under which our modern society and the heritage resources within the corridor can exist in productive harmony while at the same time fulfill the social, economic, and other requirements of present and future generations.



One of the important objectives in the river management plan is to protect, enhance, and interpret cultural and historic resources in the corridor. These resources, referred to as heritage resources, include the physical remains of sites, structures, or objects used by humans in the past. Heritage resources may be historic, prehistoric, archaeological, or architectural in nature and may, in some cases, be grouped into districts on the basis of shared characteristics.

The values of heritage resources are in the story they tell about former lifeways, human adaptations to different environments, cultural

diversity through time and space, and human behavior in general. This story may be embodied in architectural style, engineering feats, tool types, location with respect to natural resources; or it may relate to an historic event that happened, or a person of historical importance. Sometimes the values are immediately apparent, as with a work of rock art (e.g., Indian God Rock) or a building of unique design or craftsmanship (e.g., the Allegheny River Hotel). More often the values can only be assessed by doing research on the resource or in documents pertaining to it, as with an archaeological site or the location of an historic event. Keys to heritage resource values may also be found in the recollections of individuals who experienced past events or lifeways (e.g., the logging industry, the petroleum industry, etc.). Heritage resource values may be aesthetic, scientific, interpretive, or utilitarian and often depend on the integrity of the resource or its surroundings.

Heritage resource protection, enhancement, and interpretation all depends upon balancing heritage resource values, the interests of the public to know about the past, the legal rights of landowners, and community values and goals.

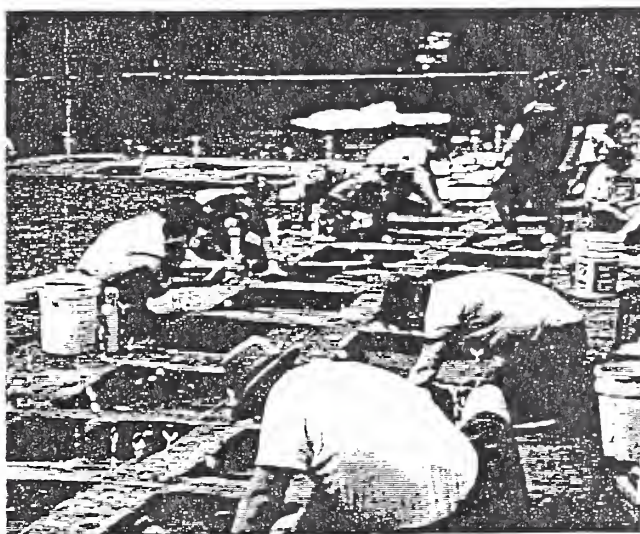
Additionally the heritage resources within the corridor should be evaluated in order to identify which resources may be eligible for inclusion on the National Register of Historic Places. Registration of those that are eligible, but are not presently on the National Register, should be encouraged and pursued (such as with the crib dam in Tionesta). Those that are on the National Register or determined eligible for inclusion should have long-term management plans developed for their protection, enhancement, and/or interpretation. These include National Register sites such as Indian God Rock and the Rockland Furnace.

IMPLEMENTATION

With the majority of the designated river corridor (72%) being in private ownership and with 28 local governments affected by the Allegheny Wild and Scenic River designation,

cooperation between federal, state and local governments, local businesses and industries, local organizations, entrepreneurs, and private citizens will be vital to the successful implementation of this management plan and river conservation. Various means can be used to achieve the goals and objectives of this plan:

- * Direct actions by the Forest Service on federal land;
- * Cooperative agreements;
- * Partnerships;
- * Private enterprise;
- * Actions by private individuals; and
- * Volunteerism.



Buckaloons Passport In Time Project

Budgets are shrinking for everyone, governments, businesses, and organizations. Creativity and cooperation between all entities affected by the Wild and Scenic River will be necessary to successfully maintain and enhance those qualities for which the Allegheny River was designated.

MANAGEMENT DIRECTION AND STANDARDS AND GUIDELINES

The following section contains management direction and standards and guidelines (S & Gs)

which which should be considered when managing lands (both public and private) within the Allegheny River corridor.

Both the state and federal governments have standards and guidelines which are applicable to their respective lands which lie within the river corridor. While these standards and guides have no legal authority over the management of municipal or private lands, it is recommended that municipal planners and private landowners consider the direction provided by these S & Gs when developing management plans for their lands.

This section also contains additional S & Gs (pages 36-44) proposed specifically for federally-administered lands which lie within the Allegheny Wild and Scenic River corridor. These S & Gs are supplemental to the current federal S & Gs contained within the Forest Plan (1986) and will amend that Plan.

Appendix G contains the state S & Gs applicable to state lands along state-designated rivers. Appendix F contains current and additional S & Gs applicable to federal lands within the Allegheny River corridor.

LOCAL LAND MANAGEMENT AND ZONING GUIDELINES

A distinguishing characteristic of the Allegheny river valley is the large amount of corridor land in private ownership (72%). Recognizing this exceptional feature of private ownership while satisfying the legislative mandate to protect "outstanding values" of the river corridor necessitates employing a variety of land protection methods. This section highlights the specific approaches which can be taken to accomplish this protection.

Congress, in designating the Allegheny as part of the National Wild and Scenic River system, recognized that the corridor possesses certain outstanding natural and cultural characteristics on both public and private lands which should be protected for the benefit of present and future generations. The desire is for a limited federal role, and to this end, the legislation provides for a cooperative approach to the management of

the area. This approach relies principally on the actions of local governments and citizens to protect the resources of the river. There is also a role for the Commonwealth of Pennsylvania.

State and local governments have broad responsibilities and many authorities (see Appendix E., Interim Management Guidelines for the Allegheny River: A Recreational Component of the Federal Wild and Scenic River System) which can be used to protect the river's resources. Several towns have in place zoning and subdivision ordinances (see Appendix H) and similar measures, which, in addition to meeting local needs, may do what Congress intended when it enacted the Allegheny Legislation. In addition the Commonwealth administers several programs, having a direct bearing on resource protection, which can and should be used to achieve the goals of the Allegheny legislation. These include erosion and sedimentation regulations, dams and encroachment, sewage planning requirements, etc.

Leaving land use decisions in the hands of local governments is the most important step in building a cooperative working arrangement among all levels of government. The programs of state government can complement these local efforts at land use regulation. In many cases these programs provide the opportunity to achieve the objectives of Congress without having to invent new approaches or institute added regulations. Because new regulations are sometimes required, however, and for the purpose of judging the adequacy of existing regulations and programs, Congress requires the Secretary of Agriculture (the Forest Service as managing agency) to develop "guidelines and standards for local zoning ordinances [P.L. 90-542, 1986]". These are the Local Land Management and Zoning Guidelines included in this River Management Plan (see Appendix H).

The federal role is to represent the federal interest in the protection of the area, promote the recreational use of the river, and to administer the National Forest land within the designated river corridor; it is not to supersede the role of state or local governments or to impose regulations on them. Rather, the Federal role is

a cooperative one, working with state and local governments.

The basic purpose of the Local Land Management and Zoning Guidelines is to encourage a cooperative approach to the land use decisions by all the various agencies at all levels of jurisdiction, within the designated Allegheny River corridor.

The Local Land Management and Zoning Guidelines provide guidance for all cooperating governments - federal, state and local - to determine:

- * local land management which is appropriate within the designated corridor;
- * the uses which might, with conditions, be deemed appropriate ; and
- * the uses which might pose a threat to the resources of the corridor, and therefore are inappropriate.

The Local Land Management and Zoning Guidelines can be implemented through the use of existing legal authorities now granted to state and local governments. The guidelines are not intended to require any local government to take actions which might be inconsistent with, or contrary to, its own laws or to require local governments to assume any of the existing responsibilities of state or federal agencies.

In summary the purposes of the Local Land Management and Zoning Guidelines are to:

- * Maintain existing water quality of the Allegheny River;
- * Protect and enhance the unique characteristics of the designated Allegheny River corridor and provide for recreational and other public uses while protecting the Allegheny River as a natural resource;
- * Conserve river area resources;
- * Protect the health, safety, and welfare of river corridor residents and visitors;
- * Protect, encourage and promote the

continuation of existing and traditional land use and ownership (i.e. timber management, agricultural, residential, etc.) in a way which is sensitive to river corridor values;

- * Identify those future land uses which are appropriate, would be appropriate with conditions, and would not be appropriate; and
- * Identify standards, regulations and types of programs, which substantially conform to the guidelines, and therefore might be applied by local governments.

Implementation of these guidelines is on a voluntary basis, but local governments are encouraged to incorporate these guidelines into comprehensive land use planning and river conservation measures.

The actions of all levels of government - federal, state and local - should contribute to true cooperative management of the Allegheny River; these actions should be consistent with the intent of the Allegheny River Management Plan, the Allegheny River legislation, and the Wild and Scenic Rivers Act.

The Forest Service and the Commonwealth of Pennsylvania have jurisdictions for activities in and on the river relating to recreational use. The jurisdiction does not apply to the bottom of the river or private land areas in the designated river corridor.

Forest Service Administered Lands

The Forest Service has proprietary jurisdiction over lands and structures which the agency owns or leases. The agency's primary management responsibilities will be in the area of river recreation, cultural resource preservation, interpretation of natural and cultural features, visitor education, and public information.

The Forest Service will continue to administer federal land within the proclamation boundary within the river corridor in a manner consistent with the intent of the legislation and the Local Land Management and Zoning Guidelines. All

Forest Service administered lands within the corridor are presently in Management Areas 5, 6.1, 6.4, 7, or 8. (See Maps 4A-4D, Pages 36-39.)

- * The emphasis in Management Area 5 is to provide a natural ecosystem in Congressionally designated wilderness. Seven islands within the Forest boundary are in Management Area 5 (Allegheny Islands Wilderness). The primary purpose is to: preserve natural ecosystems; protect the wilderness character for future generations; and provide a wilderness experience in a natural-appearing, unmodified environment within a semi-primitive non-motorized recreation setting.
- * The emphasis in Management Area 6.1 is to provide a land condition with vegetation predominantly made up of mature and overmature hardwood forests. The primary purpose is to: maintain or enhance scenic quality; emphasize a variety of dispersed recreation activities in a semi-primitive motorized setting; and emphasize wildlife species which require mature or overmature hardwood forests such as turkey, bear, cavity nesting birds and mammals.
- * The emphasis in Management Area 6.4 is to provide a land condition with vegetation generally progressing through the natural succession process to mature and overmature hardwood forest. The primary purpose is to: preserve and protect the natural, scientific, historic, archaeological, ecological, educational, watershed and wildlife values; and provide for enhancement of dispersed semi-primitive motorized and non-motorized recreation opportunities.
- * The emphasis of Management Area 7 is to provide high-density, destination-type developments within a forest environment. The primary purpose is to: provide high-density, self-contained forest recreation developments in a rural setting; and vegetation management that

will ensure the long-term viability, safety, and attractiveness of the area continues throughout the anticipated life of the development.

- * The emphasis of Management Area 8 is for special areas on the Forest.

The Allegheny National Forest (ANF) Land and Resource Management Plan (USDA Forest Service, 1986) governs and directs the management of the Forest. Standards and Guidelines (S & Gs) have been developed for the various management areas within the ANF.

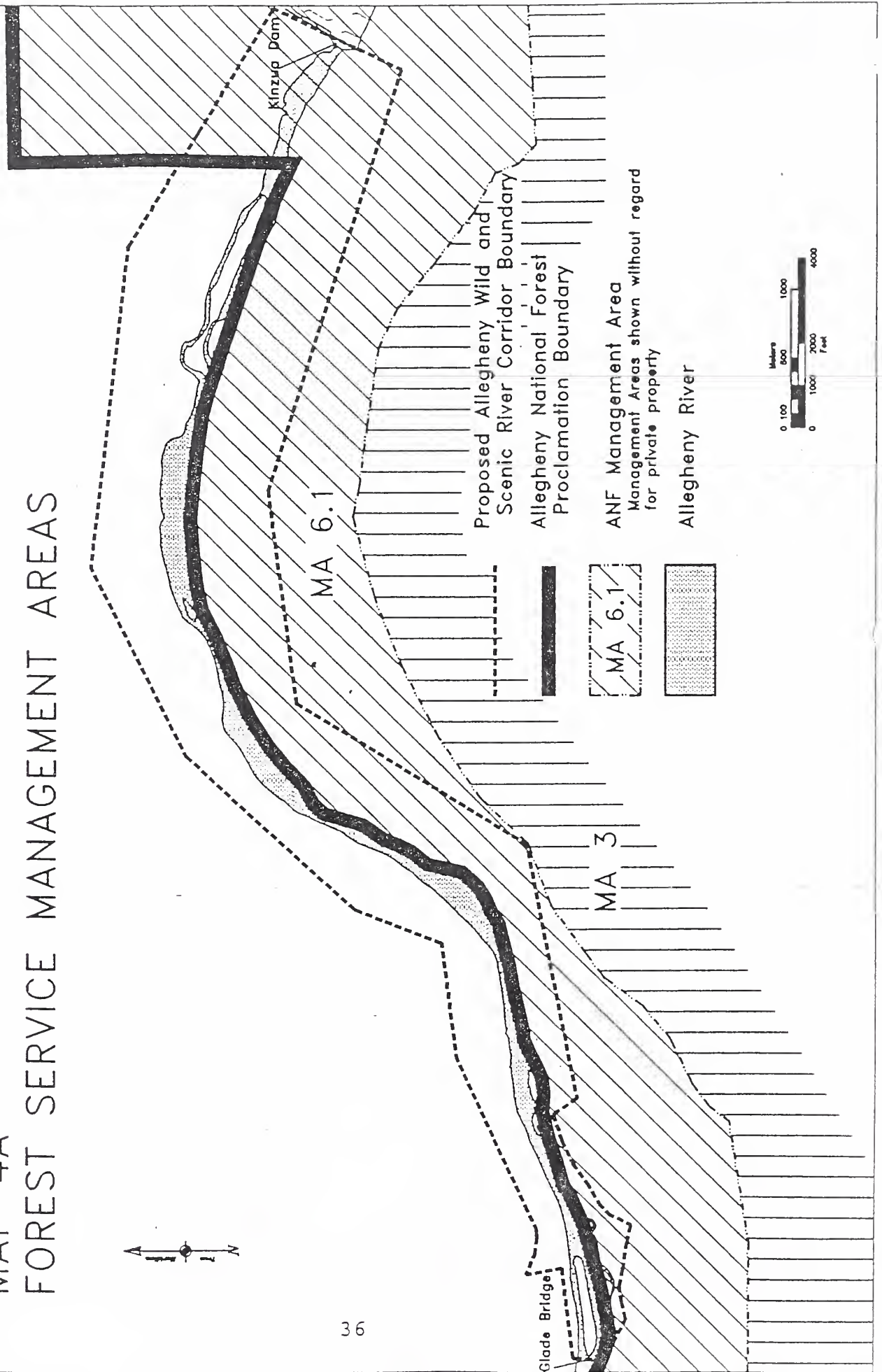
The Allegheny Wild and Scenic River Management Plan will amend the ANF Land and Resource Management Plan. Standards and Guidelines of both Plans will apply within the river corridor.

State Administered Lands

The Commonwealth of Pennsylvania has management plans and policies which govern the management of Fish and Boat Commission, Game Commission and Bureau of Forestry lands.

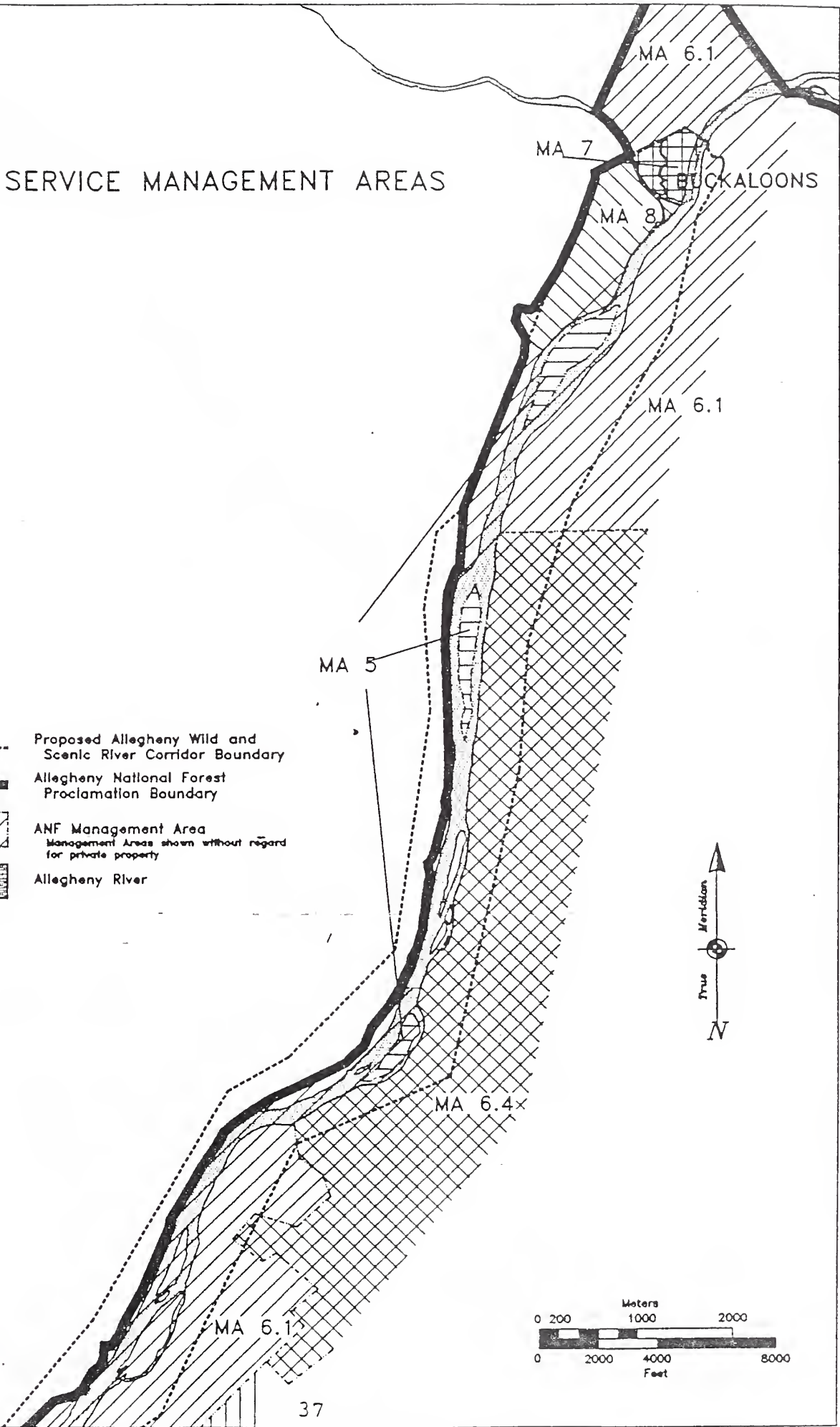
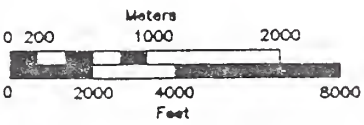
- 1) Game Commission Lands: These lands are managed primarily for the production of wildlife and hunting opportunities. Timber and land management activities which benefit wildlife may occur.
- 2) Pennsylvania Fish and Boat Commission Lands: These lands include access sites and the fish hatchery in Tionesta.
- 3) Pennsylvania Bureau of Forestry Lands: The goal is to manage State Forest lands under sound ecosystem management, to retain their wild character and maintain biological diversity while providing pure water, opportunities for low density recreation, habitats for forest plants and animals, sustained yields of high quality timber, and environmentally sound utilization of mineral resources.

MAP 4A FOREST SERVICE MANAGEMENT AREAS

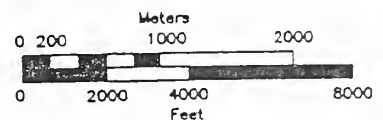


MAP 4B FOREST SERVICE MANAGEMENT AREAS

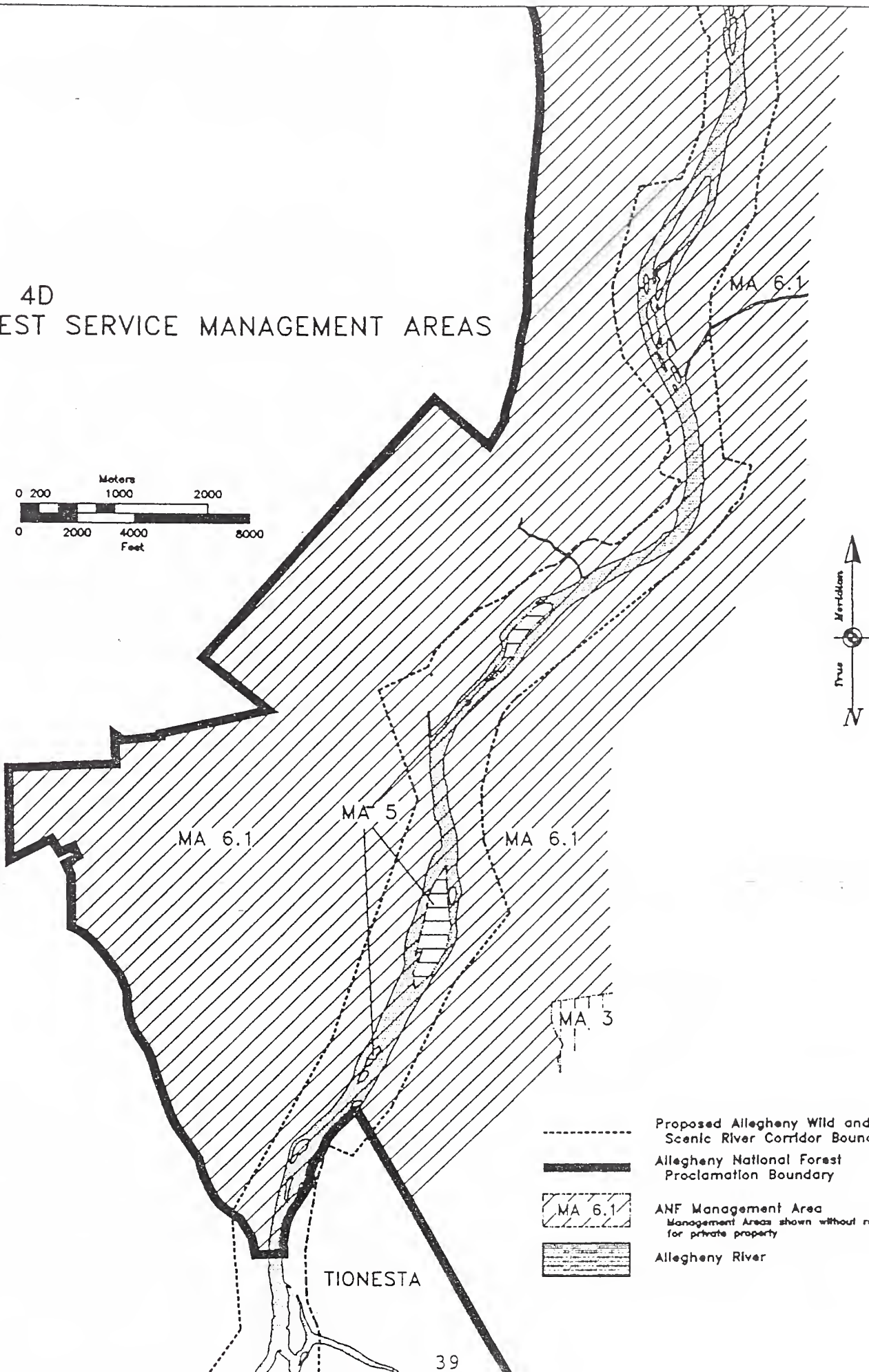
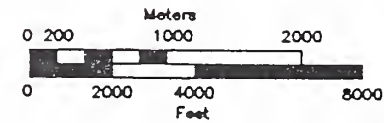
- Proposed Allegheny Wild and Scenic River Corridor Boundary
- Allegheny National Forest Proclamation Boundary
- MA 6.1 ANF Management Area
Management Areas shown without regard for private property
- Allegheny River



-
-
- Proposed Allegheny Wild and
Scenic River Corridor Boundary
- Allegheny National Forest
Proclamation Boundary
- MA 6.1
- ANF Management Area
Management Areas shown without regard
for private property
- Allegheny River



MAP 4D
FOREST SERVICE MANAGEMENT AREAS



- Proposed Allegheny Wild and Scenic River Corridor Boundary
- Allegheny National Forest Proclamation Boundary
- MA 6.1 ANF Management Area
Management Areas shown without regard for private property
- Allegheny River

Municipal and Privately Owned Land

Municipalities and private land owners are encouraged to consider any of the federal (Appendix F) and state (Appendix G) standards and guidelines when planning projects on or developing management strategies for land within the Wild and Scenic River corridor. These standards and guidelines are intended to protect the river resources, which include water quality, wildlife habitat, visual characteristics, riparian areas and heritage resources. It is also recommended that private landowners consider using the information contained in Local Land Management and Zoning Guidelines (Appendix H) and Heritage Resource Protection (Appendix I) when deciding how to manage their land within the designated river corridor.

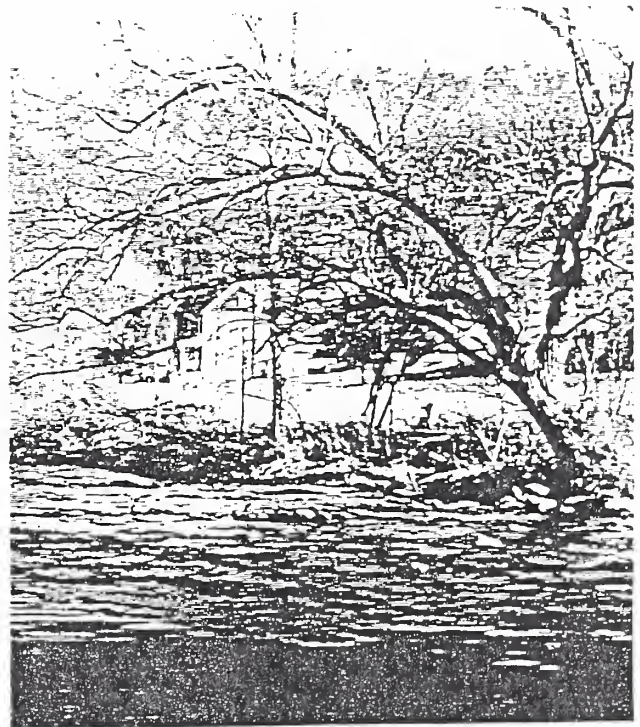
RIPARIAN AREA MANAGEMENT

Riparian area management includes the riparian zone and the riparian zone of influence (see Figure A, page 10).

Private landowners within the corridor are encouraged to use ANF standards and guidelines (see Appendix F) when managing riparian buffers on forested lands. The following standards and guidelines are mainly designed for non-forested areas [USDA, undated].

- * Riparian forest buffers should be used in conjunction with sound land management systems that include nutrient management and erosion and sedimentation control.
- * Sediment removal - The streamside forest must be wide enough to filter sediment from surface runoff. Maximum effectiveness depends on uniform shallow overland flow. (The steeper the slope, the wider the buffer necessary.) There are various methods and tables available to determine the width of forest buffer strips.
- * Periodic minor ground shaping may be necessary to encourage dispersed flow (runoff) and discourage concentrated flow.
- * Management for wildlife habitat, aesthetics and timber are not incompatible with

riparian forest buffer objectives as long as shade levels and production of leaf litter, detritus and large woody debris are maintained.



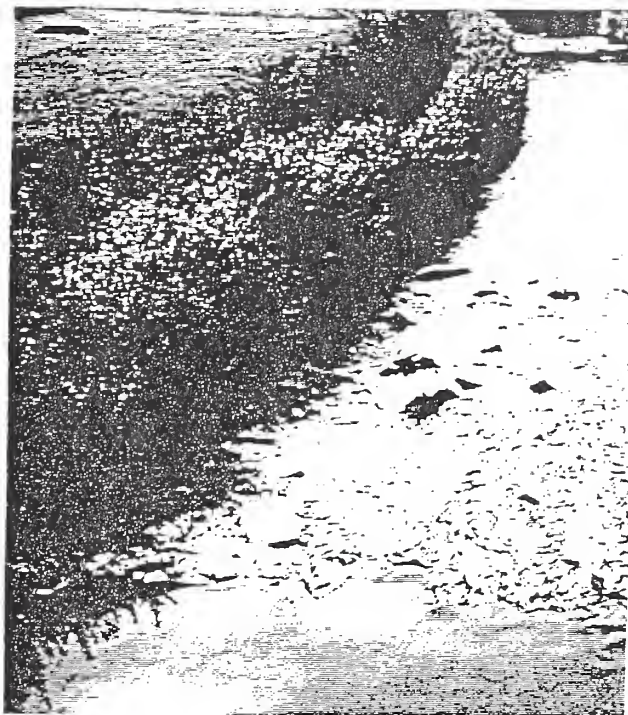
- * A portion of the riparian forest directly adjacent to the river/stream (see figure A, page 10) should be managed to maintain a stable streamside ecology and to provide detritus and large debris to the stream. Dominant vegetation should be composed of a variety of native riparian tree and shrub species (planted as necessary) for streambank stabilization. Timber harvesting in the riparian area adjacent to the river/stream should be limited to only occasional tree removal where water quality values are not compromised. Ground disturbance that loosens or exposes soil is the main contributor to erosion and sedimentation. By excluding logging and other overland equipment from riparian areas, except for stream crossings and stabilization work, the potential for erosion and sedimentation will be reduced. Livestock should be excluded from this area, except as necessary for stream crossings and designed watering sites.

- * Crown cover should be managed along tributaries to the Allegheny River to ensure that stream temperatures are maintained within the range necessary for the growth and survival of native aquatic species. This would then help provide the desired stream temperature level for native aquatic species in the Allegheny River.
- * The riparian forest buffer area adjacent to the riparian zone (riparian area of influence, see Figure A, page 10) should have vegetation comprised of riparian trees and shrubs suitable to the site, with emphasis on native species. Species suitability information should be developed in consultation with state and federal forestry agencies, the Natural Resource Conservation Service, and the USDI Fish and Wildlife Service. Periodic harvesting and timber stand improvement in the riparian area of influence are appropriate to maintain vigorous stand growth and leaf litter replacement and to remove nutrients and pollutants which may be sequestered in the form of wood in tree boles and large branches; this is especially important where runoff from agricultural land contains fertilizer. Appropriate logging equipment recommendations should be determined in consultation with state and federal forestry agencies.

Landowners within the river corridor are encouraged to maintain and/or restore the riparian forest buffer. This should be done following the recommendations and specifications in "Riparian Forest Buffers" (USDA, undated). In areas where agricultural lands and lawns are adjacent to the river, the riparian forest buffer becomes especially important.

Residential development in the riparian forest buffer can be a compatible use, if care is taken to maintain the physical characteristics of the streamside forest: 1) a forest canopy that provides leaf litter and shade and 2) a layer of shrub vegetation. Areas of extensive lawn should be avoided, because grass cover does not provide the buffering effect of forest leaf litter and also does not slow stormwater runoff. Consultation with county, state and federal agencies can help private landowners to include riparian forest buffers in their landscaping plans,

thus helping to prevent water pollution and improve water quality. Landowners should be encouraged to maintain existing forest buffers through selective thinning and pruning.



RECREATION

Recreation Opportunity

- * The upper section - Kinzua Dam to Tionesta - should be managed to provide users with recreational opportunities consistent with the Rural ROS classification.
- * The lower section - Tionesta to Emlenton - should be managed to provide users with recreational opportunities consistent with the Roaded Natural ROS classification.

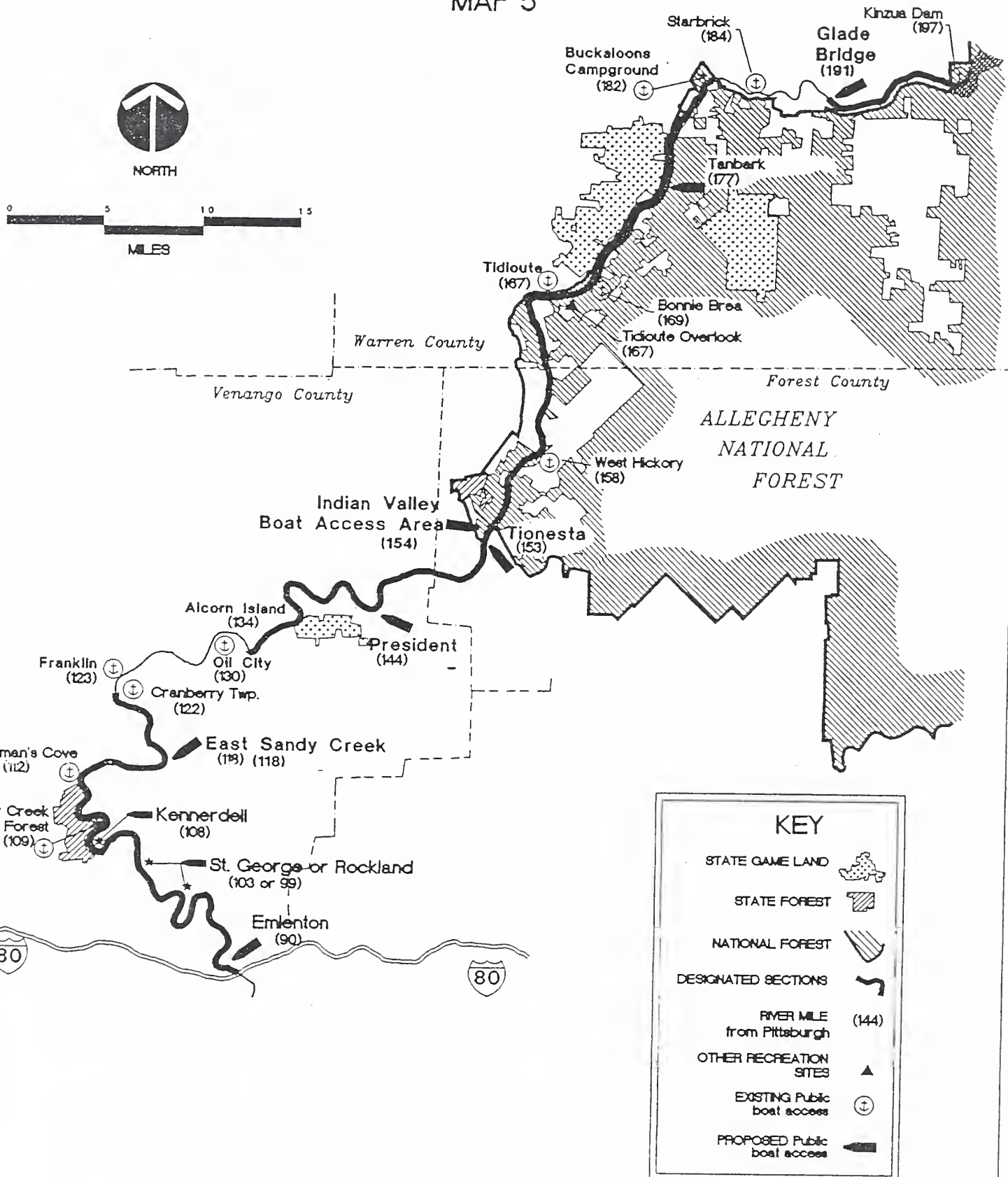
Recreational Developments Outside the ANF Proclamation Boundary

It is recommended that when access sites are developed outside of the ANF proclamation boundary, that ANF Forest standards and guidelines are considered.

Where new access or recreational sites are being proposed in Alternative 3 of the Allegheny National Wild and Scenic River Final Environmental Impact Statement [FEIS] (see

ALTERNATIVE 3 RECREATION SITE LOCATION MAP ALLEGHENY NATIONAL WILD & SCENIC RIVER

MAP 5



Map 4, page 25), specific sites have not been selected. (Alternative 3 FEIS identified the need for new access sites in the following areas: Tanbark Trailhead [upriver from present trailhead], Indian Valley [above Tionesta], President, Kennerdell, and Emlenton.)

The intent is that an access site is needed and should be developed somewhere in the vicinity of the location described.

No determination of who should develop specific access sites outside of the ANF proclamation boundary has been made. Development of access sites will be on a case by case basis and can be by federal, state, or local agencies, private enterprise, or in partnership between any of the entities.

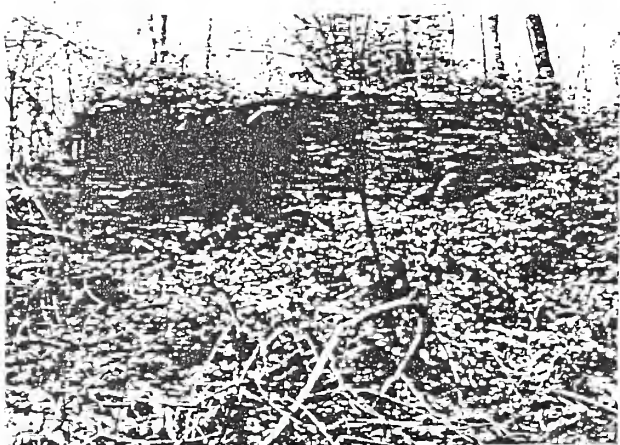
For health and safety reasons it is recommended that where feasible, in access sites with high use, toilet facilities and drinking water be provided

HERITAGE RESOURCES

The objective is to protect and enhance outstanding heritage resources in the Allegheny Wild and Scenic River Corridor.

Historic sites

The integrity of sites within the corridor and listed on or eligible for listing on the National Register of Historic Places should be maintained.



Archaeological sites

The integrity of sites that are important in understanding and interpreting the activities of prehistoric and historic cultures in the Allegheny Wild and Scenic River Corridor and that are on or eligible for inclusion on the National Register of Historic Places should be maintained.

Along these lines the Allegheny National Forest shall administer heritage resources under its ownership, control, and jurisdiction in a spirit of stewardship for the inspiration and benefit of present and future generations. Existing laws and regulations provide the ANF with guidance and direction to conduct an inventory of heritage resources on its lands within the corridor and to evaluate the significance of these resources and to take appropriate measures whenever appropriate to protect, enhance, and/or interpret significant heritage resources.

With regard to heritage resources on non-federally owned land, the Allegheny National Forest will provide encouragement to organizations and individuals undertaking preservation by private means; encourage public and private preservation and utilization of all usable elements of the historic built environment, and encourage state and local governments to expand and accelerate their historic preservation programs, archaeological site stewardship programs, and other heritage resource identification, evaluation, enhancement, and interpretation activities.

Appendix I discusses protection of heritage resources on private property within the designated river corridor and provides a summary chart of protection strategies. This chart outlines and explains the techniques and the advantages and disadvantages of ownership options (government, nonprofit purchase, transfer of title), financing options (nonprofit, government) and development regulatory techniques, environmental review, laws specific to archaeology, non-regulatory strategies, and financial incentives.

TIMBER MANAGEMENT

No management areas assigned to federal land within the river corridor have timber production as the primary objective. However, private land owners within the river corridor may wish to harvest timber on their property. Timber management and harvesting can be compatible with river management as long as protection of river resources are kept in mind. River values such as water quality, wildlife habitat, visual characteristics, riparian areas and heritage resources should be considered when developing long-term goals and objectives for management of recreation, timber, wildlife, water quality.

When managing for timber, particular attention needs to be paid to maintaining the riparian forest buffer, water quality, and where possible the current visual character of the river. Care in developing erosion and sedimentation plans and strict adherence to those plans will help maintain water quality during and after harvesting operations. Prompt reforestation of harvested stands and revegetation of disturbed areas such as roads, skid trails, landings, is critical in the prevention of erosion and sedimentation, maintenance of water quality and visual quality within the corridor.

In currently forested and riparian areas, maintaining continuous forest cover is important. Land managers should consider alternatives to traditional silviculture treatments in order to obtain these objectives while managing for timber production.



Participation in programs such as the Forest Stewardship Program (PA Bureau of Forestry), consultation with local County Extension Agents and consulting foresters, and adherence to "Best

Management Practices for Silvicultural Activities in Pennsylvania's Forest Wetlands" (Forested Wetlands Taskforce, 1993) will help insure that river values are protected while managing for timber production on private lands within the river corridor. (Additional sources of information can be found in the Reference section, Appendix A).

MINERALS AND GEOLOGY

The state agency regulating oil, gas, and mineral development is the Pennsylvania Department of Environmental Resources. The state agency having geologic and potential resource information is the Bureau of Topographic and Geologic Survey, DCNR. Landowners are required to coordinate with the Department of Conservation and Natural Resources when considering these activities. Associated activities such as road building and timber harvesting would require appropriate Erosion and Sedimentation Plans.

LAW ENFORCEMENT

Rules and regulations will continue to be monitored and enforced on federal lands within the designated river corridor by Forest Service personnel and cooperators. Law enforcement concerns within the designated river corridor will continue to be monitored. An annual meeting with law enforcement agencies and management will be conducted to identify problems and concerns and to coordinate enforcement of laws and regulations pertaining to the Allegheny Wild and Scenic River corridor.

LAND ACQUISITION

Within the Allegheny National Forest Proclamation Boundary

The Allegheny National Forest will continue its policy of acquiring lands and partial interests in lands within the National Forest boundary which provide public benefit, reduce management costs and improve management. In line with this policy, the Forest Service will consider acquisition of river islands or other corridor lands on a

willing seller/willing buyer basis. Islands and corridor lands which are potentially desirable for purchase total approximately 420 acres. Ongoing efforts to acquire some parcels are at various stages and will continue based on landowner interest and available funding.

Outside of the Allegheny National Forest Service Proclamation Boundary

The Wild and Scenic Rivers Act (Public Law 102-271) authorizes the Forest Service to acquire land and mineral rights within the designated river corridor which are necessary for the management and protection of the river. The majority of the new access sites proposed in the Allegheny River EIS are in areas where there is no public land. It is, therefore, expected that the development of these sites will be initiated by the private sector, local municipalities, or other public agencies. If future monitoring indicates that an urgent need for an access site is not being met, the Forest Service would need to further analyze the need for river access in that area.

The Forest Service has the authority (P.L.102-271) purchase lands within the corridor outside of the ANF proclamation boundary to protect resources. It was determined in the Allegheny River FEIS (Alternative 2) that land acquisition could be pursued by the Forest Service within the designated river corridor as a last resort to protect threatened river resources. Any land acquisition considered under these circumstances must be on a willing seller/willing buyer basis. However, it is recommended that land acquisition for public benefit outside the ANF proclamation boundary be done through appropriate state or local agencies, as determined by such things as reasons for acquisition, location, and availability of funding. The Forest Service has no interest in acquiring other lands within the river corridor outside of the ANF proclamation boundary. While acquisition could be by various state agencies, counties or local municipalities, ultimate management should be in cooperation with Forest Service.

STANDARDS AND GUIDELINES

The following section includes current ANF Standards & Guidelines, excerpted from the Allegheny National Forest Land and Resource Management Plan, 1986. These S & Gs are applicable to those management areas of the Allegheny National Forest within the proposed Allegheny Wild and Scenic River corridor and apply only to federally administered land.

ADDITIONAL ANF STANDARDS AND GUIDELINES - APPLICABLE WITHIN THE ALLEGHENY RIVER CORRIDOR

These standards and guidelines are in addition to the current S & Gs which provide management and direction for federal lands within the Allegheny River corridor. For a compilation of current and additional standards and guides for these lands please see Appendix F.

See pages 41-45 for a table of additional federal Standards and Guidelines.

Human and Community Development

- Volunteers and personnel from other programs hosted by the Forest Service could be used to accomplish needed work within the river corridor. Encourage participation in the Pennsylvania Fish and Boat Commission's "Adopt-a-Stream" program and the Department of Conservation and Natural Resources Water Monitoring Program.
- Provide technical assistance as requested to landowners desiring to implement corridor guides.

Information Services

The information services provided for the Allegheny Wild and Scenic River are intended to satisfy the three information needs of users of the Allegheny River corridor. These needs are: directional, behavioral, and interpretive. The services will inform river users of recreational opportunities and laws and regulations

be provided through a variety of media, including but not limited to signs, brochures, personal contacts, and news media.

- Develop a sign plan for the river corridor including inventory of existing signs, analysis of needs and standards of future signing .
- Provide signing at access sites that informs users of the site location within the corridor, river regulations including water safety, emergency services, special interpretive features, and activities available in the area.
- Provide signing on the river to enable river users to locate and land safely at the public access sites.
- Through signing, brochures, and maps provide distances between various river features and access sites for convenience and safety of river users.
- All informational signing within the river corridor on National Forest will be uniform in color and design as provided in the Forest Service Sign Handbook and River Sign Plan (To be developed). Signing along roads, trails and within recreation sites should be simple, easily read and organized.
- An information system using a variety of media should be developed for river users that will identify public lands, recreation opportunities, public facilities, landmarks on the river, trail opportunities, regulations, safety messages, and special features/points of interest.
- All information media should emphasize "Leave No Trace or Pack-in Pack-out", respect private property rights , and water safety throughout the corridor.
- Information and Interpretive media will be coordinated with the local agencies, Chambers of Commerce, Tourist Promotion Agencies, Oil Region Heritage Park, State agencies etc. to assure accuracy and eliminate redundancy.

- Design an Allegheny River brochure that lists the three classifications of Wild and Scenic Rivers, and explains that the Allegheny has a "recreational" classification, identifies the values that made the river worthy of being a National Wild and Scenic River, tells why it needs to be protected and what the user can do to protect it, and includes information on sensitive, threatened and endangered species.
- * Forest Service and the Pennsylvania Department of Environmental Resources will cooperate with and encourage riparian landowner organizations, local Chambers of Commerce, local governments, trail organizations, fishing groups, outfitters and guides, commercial establishments, etc., to develop appropriate means of meeting river users' recreational and informational needs.

(On private land, it is recommended that signs should at least compliment the color and basic design of those on National Forest and carry the Wild and Scenic River logo.)

Visual Quality

Vegetation will be allowed to evolve naturally within the forested riparian buffer, unless restoration work is necessary. Restoration work will use native plants. Maintain or enhance the streambank vegetation that provides screening of man-made facilities and activities.

Maintain or enhance the integrity of the Landscape Types 1 - 3 by allowing changes consistent with the future condition descriptions (see page 14).

Landscape 1: Broad Valleys with Pastoral/Rural Scenes

A broad river valley characterized by a wide river with slow eddies and having a distinctly pastoral landscape consisting of farmland, rural settlements, rustic cabins, and river towns.

Landscape 2: Narrow Valley with Natural Appearing Islands

A somewhat narrower river valley dotted with many islands which divide the normally wide river into smaller, faster-flowing channels. This gives a recreationist on the water an intimate experience with the river.

To anyone exploring the island channels, the quickly-changing landscape enhances the visual experience. Key features of this landscape are the apparent natural vegetation, undeveloped islands and the surrounding river shorelines. These features suggest a more wild or natural setting than described under Landscape 1.

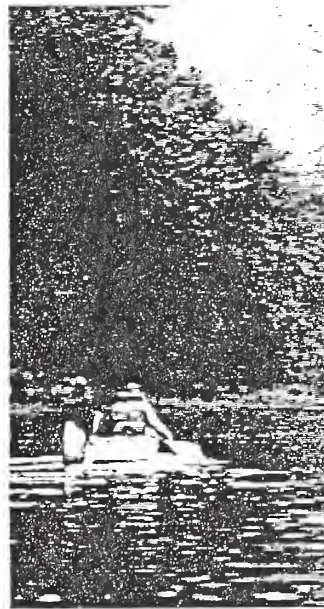


Landscape 3: Narrow, Sharply Winding Valley with Steep Sideslopes

An unusually narrow valley that has very steep slopes and bends so sharp that they nearly turn back on themselves. This topography forms distinct focal landscapes with strong spatial enclosure, a feature very uncommon for rivers of this size and length.

This is also the least developed section of the entire Allegheny River (between Franklin and Emlenton). The steep slopes and narrow floodplains deter significant agricultural, commercial, residential or community development. The forest canopy appears nearly continuous along the shoreline and at the focal points described above.

Landscapes 1 and 2 can be found in the sections of river from Kinzua Dam to Oil City. The visual contrasts afforded by moving through pastoral landscape into a more natural island landscape, all within the backdrop of steep forested hillsides, form a unique scenic experience.



Below Franklin, river scenery and character change rather dramatically to the character described as Landscape 3. This section of river contains seven sharp bends that form distinct focal landscape scenes. From a regional perspective, this landscape is considered both unique and outstandingly remarkable.

Within these three landscapes exist certain lands which are critical to maintaining the river's visual resources - "critical visual areas." On the Allegheny River, these areas include all of the river islands, shoreline areas and focal landscapes.

Landscapes within the corridor will be managed under the visual quality objective of Retention which recommends that management activities not be visually evident to the average visitor. Any management activity or development should be designed to blend with the form, line, color and texture of the natural surroundings.

Riparian Area Management

Riparian area management includes the riparian zone and the riparian zone of influence (see Figure A, page 10).

Perennial Streams

Along perennial streams, streamside management zones would be established to meet fisheries and wildlife management objectives. The distances, listed in Table

III-1, are for each side of a stream, and could be located within a wider riparian area.

Table III-1. Streamside Management Zone Distances.

STREAM WIDTH (bankfull)	STREAMSIDE MANAGEMENT ZONE
defined stream channel-<10'	75'+2'/1% slope
>10'	100'+2'/1% slope

As stream width increases, the size of large woody debris must also increase to be effective in the formation of quality fish habitat. To provide long-term input of large woody debris to a stream, a sufficient number of trees within the streamside management zone should be allowed to grow to biological maturity. These trees, as some begin to fall naturally into streams, create habitat diversity for aquatic life. These zones do not necessarily follow riparian area boundaries and are the most effective on tributaries to the Allegheny River.

Intermittent Streams

Intermittent streams within the corridor should be managed to:

- maintain trees that are providing streambank stability;
- maintain trees growing within a stream channel for stability purposes;
- provide for continued input of leaf litter (intermittent streams transport leaf litter by periodic flushings into downstream reaches of perennial waters, as well as provide habitat for aquatic invertebrates within these intermittent channels [Williams and Hynes 1976, Williams and Hynes 1977]); and
- continue with the current Forest Plan standard and guideline of a suggested filter strip width during timber harvesting of 50'+2'/1% slope (Forest

Plan page 4-24), or the actual size of the riparian area, whichever is larger.

Recreation Developments

Alternative 3 of the Allegheny River FEIS proposes the development of two new access sites within the ANF proclamation boundary: 1) Tanbark and 2) Indian Valley.

- Facilities provided for recreational activities will be compatible with the management objectives of this document.
- Recreational facilities will be designed to accomplish the future condition described on pages 29-30.
- Emphasize a "Leave No Trace" policy where users are required to haul away their own trash and leave no trace of their visit. ("Leave No Trace" is a national program used by various federal agencies.)
- Riparian vegetative buffers will be restored and maintained at access sites to screen man-made elements as seen from the river.
- Where feasible, boat launch sites will be designed to accommodate motorized watercraft as well as non-motorized watercraft.
- Design of all facilities should generally be in keeping with the surrounding form, line, color and texture of the river environment.
- Maintain dispersed campsites to standards that protect the natural resources, respect private property, and maintains or enhances the recreation experience opportunities being provided. Develop a dispersed campsite management plan that includes inventory, analysis and recommendations for management standards.



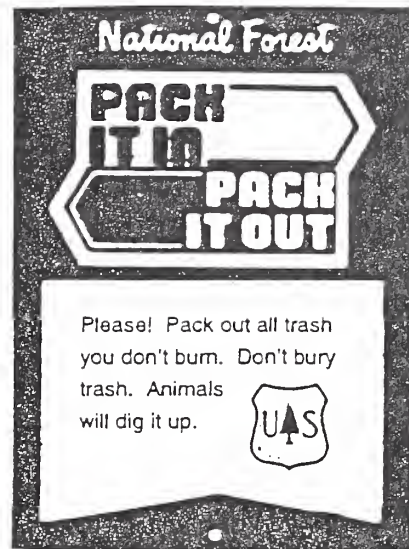
Timber Management

Where timber management is appropriate, uneven-aged management is preferable, because it will help maintain forested cover and the current visual character of the river corridor.

If even-aged management is practiced, openings should be kept relatively small and irregular in shape to maintain the visual character of the river corridor.

Land Acquisition

The Allegheny National Forest will continue its policy of acquiring lands within the National Forest Proclamation boundary which provide public benefit, reduce management costs and improve management. In line with this policy, the Forest Service will consider acquisition of river islands or other corridor lands on a willing seller/willing buyer basis. Islands and corridor lands which are desirable for purchase total approximately 420 acres. Ongoing efforts to acquire some parcels are at various stages, and will continue based on landowner interest and available funding.



ADDITIONAL STANDARDS AND GUIDELINES FOR FEDERAL LANDS WITHIN THE ALLEGHENY WILD AND SCENIC RIVER

(Some standards and guidelines are not applicable to certain management areas (MA) because of the emphasis of that particular management area or because certain activities are excluded from some MAs.)

ADDITIONAL FEDERAL STANDARDS TO BE APPLIED WITHIN THE ALLEGHENY RIVER CORRIDOR	MANAGEMENT AREA TO WHICH ADDITIONAL STANDARD APPLIES				
	5	6.1	6.4	7	8
Human and Community Development					
- Volunteers and personnel from other programs hosted by the Forest Service could be used to accomplish needed work within the river corridor. Encourage participation in the Pennsylvania Fish and Boat Commission's "Adopt-a-Stream" program and the Department of Conservation and Natural Resources Water Monitoring Program.	X	X	X	X	X
- Provide technical assistance as requested to landowners desiring to implement corridor guides.	X	X	X	X	X
Information Services					
The information services provided for the Allegheny Wild and Scenic River are intended to satisfy the three information needs of users of the Allegheny River corridor. These needs are: directional, behavioral, and interpretive. The services will inform river users of recreational opportunities and laws and regulations pertaining to specific activities. Information will be provided through a variety of media, including but not limited to signs, brochures, personal contacts, and news media.					
- An information system using a variety of media should be developed for river users that would identify public lands, recreation opportunities, public facilities, landmarks on the river, trail; opportunities, regulations, safety messages, and special features/ points of interest.	X	X	X	X	X
- All information media should emphasize "Leave no Trace of Pack-In Pack-Out", respect for private property rights, and water safety throughout the corridor.	X	X	X	X	X
- Information and interpretive media will be coordinated with local agencies, Chambers of Commerce, Tourist Promotion agencies, Oil Region Heritage Park, State agencies, etc., to assure accuracy and eliminate redundancy.	X	X	X	X	X
- Design an Allegheny River brochure that lists the three classifications of Wild and Scenic Rivers, and explains that the Allegheny has a "recreational" classification, identifies the values that made the river worthy of being a National Wild and Scenic River, tells why it needs to be protected and what the user can do to protect it, and includes information on sensitive, threatened and endangered species.	X	X	X	X	X
- The Forest Service and the Pennsylvania Department of Environmental Resources will cooperate with and encourage riparian landowner organizations, local Chambers of Commerce, local governments, trail organizations, organized fishing groups, outfitters and guides, commercial establishments etc., to develop appropriate means of meeting the river users' recreational and informational needs.	X	X	X	X	X

ADDITIONAL FEDERAL STANDARDS TO BE APPLIED WITHIN THE ALLEGHENY RIVER CORRIDOR

	MANAGEMENT AREA TO WHICH ADDITIONAL STANDARD APPLIES				
	5	6.1	6.4	7	8
<p><u>Information Services cont.</u></p> <ul style="list-style-type: none"> - The Forest Service will cooperate with the Oil Region Heritage Park and others to develop an interpretation plan for the river that will be consistent throughout it's length. Interpretive information may include such themes as the riverine ecosystem, the outstanding remarkable values, cultural history, or the Allegheny Islands Wilderness.- The Forest Service and the Pennsylvania 	X	X	X	X	X
<p><u>Signs</u></p> <ul style="list-style-type: none"> - Develop a sign plan for the river corridor including inventory of existing signs, analysis of needs and standards of future signing. - Provide signing at access sites that inform users of the sight locating within the river corridor, river regulations including water safety, emergency services, special interpretive features, and activities available in the area. - Provide signing on the river to enable river users to locate and land safety at the public access sites. - Through signing, brochures and maps provide distances between various river features and access sites for safety and convenience of river users. - All informational signing within the river on National Forest will be uniform in color and design as provided in the Forest Service Handbook and River Sign Plan (to be developed). Signing along roads, trails and within recreations sites should be simple, easily read and organized. 	N A	X	NA	X	N A
<p><u>Visual Quality</u></p> <ul style="list-style-type: none"> - Vegetation will be allowed to evolve naturally within the forested riparian buffer, unless restoration work is necessary. Restoration work will use native plants. Maintain or enhance the streambank vegetation that provides screening of man-made facilities and activities. - Maintain or enhance the integrity of the Landscape Types 1 - 3 by allowing changes consistent with the future condition descriptions . - Landscapes within the corridor will be managed under the visual quality objective of Retention which recommends that management activities not be visually evident to the average visitor. Any management activity or development should be designed to blend with the form, line, color and texture of the natural surroundings. 	N A	X	X	X	X

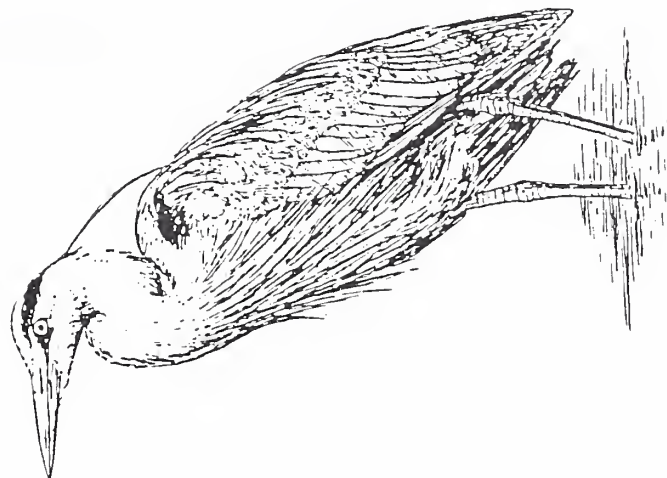
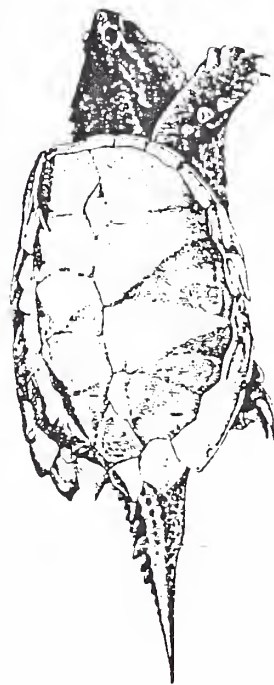
ADDITIONAL FEDERAL STANDARDS TO BE APPLIED WITHIN THE ALLEGHENY RIVER CORRIDOR	MANAGEMENT AREA TO WHICH ADDITIONAL STANDARD APPLIES				
	5	6.1	6.4	7	8
Riparian Area Management Riparian area management includes the riparian zone and the riparian zone of influence <u>Perennial Streams</u> - Along perennial streams, streamside management zones would be established to meet fisheries and wildlife management objectives. The distances are for each side of a stream, and could be located within a wider riparian area. <div> <div>STREAM WIDTH (bankfull) defined stream channel - <10' >10'</div> <div>STREAMSIDE MANAGEMENT ZONE 75'+2"/1% slope 100'+2"/1% slope</div> </div>	N A	X	X	N A	N A
- As stream width increases, the size of large woody debris must also increase to be effective in the formation of quality fish habitat. To provide long-term input of large woody debris to a stream, a sufficient number of trees within the streamside management zone should be allowed to grow to biological maturity. These trees, as some begin to fall naturally into streams, create habitat diversity for aquatic life. These zones do not necessarily follow riparian area boundaries and are the most effect effective on tributaries to the Allegheny River.	N A	X	X	N A	N A
<u>Intermittent Streams</u> Intermittent streams within the corridor should be managed to:					
- provide for continued input of leaf litter (intermittent streams transport leaf litter by periodic flushings into downstream reaches of perennial waters, as well as provide habitat for aquatic invertebrates within these intermittent channels).	N A	X	X	X	X
- continue with the current Forest Plan standard and guideline of a suggested filter strip width during timber harvesting of 50'+2'/1% slope (Forest Plan page 4-24), or the actual size of the riparian area, whichever is larger	N A	X	X	N A	N A
- maintain trees that are providing streambank stability.	N A	X	X	N A	N A
- maintain trees growing within a stream channel for stability purposes.	N A	X	X	N A	N A

ADDITIONAL FEDERAL STANDARDS TO BE APPLIED WITHIN THE ALLEGHENY RIVER CORRIDOR	MANAGEMENT AREA TO WHICH ADDITIONAL STANDARD APPLIES				
	5	6.1	6.4	7	8
Recreation Developments Alternative 3 proposes the development of two new access sites within the ANF proclamation boundary: 1) Tanbark and 2) Indian Valley.					
- Facilities provided for recreational activities will be compatible with the management objectives of this document.	N A	X	NA	N A	N A
- Recreational facilities will be designed to accomplish the future condition.	N A	X	NA	N A	N A
- Emphasize a "Leave No Trace" policy where users are required to haul away their own trash and leave no trace of their visit. ("Leave No Trace" is a national program used by various federal agencies.)	X	X	X	X	X
- Riparian vegetative buffers will be restored and maintained at access sites to screen man made elements as seen from the river.	N A	X	NA	N A	N A
- Where feasible, boat launch sites will be designed to accommodate motorized watercraft as well as non-motorized watercraft.	N A	X	NA	N A	N A
- Design of all facilities should generally be in keeping with the surrounding form, line, color and texture of the river environment.	N A	X	NA	N A	N A
- Maintain dispersed campsites to standards that protect the natural resources, respect private property, and maintains or enhances the recreation experience opportunities being provided. Develop a dispersed campsite management plan that includes inventory, analysis and recommendations for management standards.	N A	X	NA	N A	N A
Timber Management - Uneven-aged management is preferable, because it helps maintain forested cover and the current visual character of the river corridor. - If even-aged management is practiced, openings should be kept relatively small and irregular in shape to maintain the visual character of the river corridor.	N A N A	X X	X X	N A N A	N A N A

ADDITIONAL FEDERAL STANDARDS TO BE APPLIED WITHIN THE ALLEGHENY RIVER CORRIDOR

Land Acquisition

The Allegheny National Forest will continue its policy of acquiring lands within the National Forest Proclamation boundary which provide public benefit, reduce management costs and improve management. In line with this policy, the Forest Service will consider acquisition of river islands or other corridor lands on a willing seller/willing buyer basis. Islands and corridor lands which are desirable for purchase total approximately 420 acres. Ongoing efforts to acquire some parcels are at various stages, and will continue based on landowner interest and available funding.



MANAGEMENT AREA TO WHICH ADDITIONAL STANDARD APPLIES				
5	6.1	6.4	7	8
N	X	NA	N	N
A			A	A

MANAGEMENT RESPONSIBILITIES

OVERVIEW

When several layers of government and many agencies participate in river management programs, the complexity of the operation may increase. However this complexity may be useful when it promotes the cooperative use of diverse resources and authorities to provide for more comprehensive river management.

The purpose of this section is to describe the cooperative approach to be used for the management of the Allegheny National Wild and Scenic River, and to clarify the areas of responsibility of each cooperating partner in the management of the Allegheny River.

The Plan proposes that cooperative agreements, memoranda of understanding, and other instruments be used to focus efforts on river management.

The core of the management approach is the effective application of existing management authorities and the adoption of local zoning ordinances, as needed, in order to protect the resources of the river corridor. To this end, and as legislated by the National Wild and Scenic Rivers Act, these Local Land Management and Zoning Guidelines are provided.

The special provisions (U.S.P.L 102-271, 1992, Section 1) for the designation of the Allegheny Wild and Scenic River specify that a cooperative arrangement of governments-be developed to manage the river corridor. The River Management Plan will be completed by the Forest Service representing the Secretary of Agriculture. The Wild and Scenic Rivers Act (U.S.P.L 90-452, 1986, Section 10e) outlines a program for cooperation and coordination between governments at the federal, state, regional, and local levels.

Consistent with the Act, participating governments may include:

- * Warren, Forest and Venango Counties;

- * The twenty-five cities, boroughs and townships bordering the river:

Warren County:

Glade Township	Meade Township
City of Warren	Brokenstraw Township
Pleasant Township	Deerfield Township
Watson Township	Limestone Township
Tidioute Borough	Triumph Township

Forest County

Harmony Township	Hickory Township
Tionesta Borough	Tionesta Township

Venango County

President Township	Cornplanter Township
Cranberry Township	City of Oil City
Sandy Creek Township	Rockland Township
Victory Township	Clinton Township
City of Franklin	
Scrubgrass Township	Richland Township
Emlenton Borough	

- * The Commonwealth of Pennsylvania's designee, the Department of Conservation and Natural Resources; and
- * The Secretary of Agriculture's designee, the U.S. Forest Service.

This Plan minimizes the imposition of new programs and regulations in the river corridor, opting instead to seek proper awareness and enforcement of existing federal, state and local laws. While the final authority and responsibility for administering and enforcing the plan rests with the Secretary of Agriculture's designee, the Forest Service, the Plan places specific emphasis on management cooperation between the federal, state and local governments in order to maximize the use of existing prerogatives. Upon final approval by the Forest Service, the Plan becomes binding on the Department of Agriculture. The Forest Service has no authority on private lands, and therefore cannot impose federal regulations on private land within the corridor.

MANAGEMENT RESPONSIBILITIES OF THE MUNICIPALITIES

There are no legal requirements placed on local governments to do anything which would protect river values and resources. Implementation of river conservation measures and zoning ordinances provided in Local Land Use and Zoning Guidelines is on a strictly voluntary basis. However, the twenty-five cities, boroughs and townships can serve an important management role along the Allegheny River. Their greatest role lies in developing comprehensive plans and zoning ordinances to manage land uses within the river corridor in a way that ensures the purposes for which the river was designated.

To effectively protect river values and resources, local governments could:

1. Implementate and enforce comprehensive plans and land use regulations and management techniques for protection of the land and water resources of the river and river corridor;
2. Implementation and enforce ordinances prohibiting the disposal of solid and toxic wastes;
3. Consider the appointment of park and recreation boards to coordinate the development, management, and maintenance of recreation facilities related to the river corridor for local residents, and where desired, for visitors, with the object of minimizing conflicts between the two groups.

MANAGEMENT RESPONSIBILITIES OF THE COUNTIES

Three counties are affected by the Allegheny River designation: Warren, Forest and Venango. The three counties will continue to enforce county laws, maintain county bridges, and

exercise traditional powers vested in them. Among the counties' existing programs and services are their planning agencies. The planning departments have the staff and capability to provide professional planning technical assistance to the townships and private landowners.

The counties have citizen representation on the Northern and Southern Advisory Councils respectively and have the following important responsibilities for assuring the successful implementation of the management plan:

1. The county planning offices should continue to provide technical assistance including, but not limited to, technical assistance for local planning and zoning;
2. The counties should continue to enforce all existing laws and ordinances within their purview as they may pertain to the Allegheny River;
3. The counties should bring management and enforcement problems to the attention of the appropriate management, regulatory, or enforcement agency;
4. The counties should enforce state and local soil conservation laws, except where the such responsibilities have been assigned to other agencies;
5. The counties should coordinate with the managing agencies the issuance of general permits in the designated corridor;
6. The counties should encourage landowners to become county conservation district cooperators; and
7. The counties should encourage landowner participation in the Pennsylvania Forest Stewardship program or some similar



program which provides professional guidance for private land management activities.

MANAGEMENT RESPONSIBILITIES OF THE COMMONWEALTH OF PENNSYLVANIA



Department of Conservation and Natural Resources
Bureau of Recreation and Conservation
Rivers Program

The Commonwealth of Pennsylvania has responsibilities for the protection of resources through the Pennsylvania Constitution which guarantees the citizens of the Commonwealth the right to clean air, pure water and the natural, scenic, historic and aesthetic values of the environment (Environmental Rights Amendment Article, Section 27, Pennsylvania Constitution).

Since segments of the Allegheny River were designated as a component of the National Wild and Scenic River System, it is recognized as an outstandingly remarkable river in Pennsylvania. The Commonwealth will continue to work cooperatively with the Forest Service and to coordinate with other state agencies, counties and organizations to protect and enhance the values for which the river was designated. This may be accomplished informally or formally through agreements with the Forest Service or other cooperators.

The Allegheny River Management Plan does not propose an expansion of state powers. Rather, state laws and regulations will be coordinated within state government and with those of the managing agency to ensure effective implementation of the plan.

The State shares jurisdiction with the Federal government for the following purposes:

1. With the Environmental Protection Agency for pollution control, although authority for enforcing pollution laws has been delegated to the states;

2. The U.S. Fish and Wildlife for migratory flyway management and threatened and endangered species regulation enforcement;
3. The U.S. Army Corps of Engineers for permitting activities related to obstructions to navigation under Section 10 of the Rivers and Harbors Act of 1899, and for permitting activities related to dredge-and-fill activities in wetlands under Section 404 of the Clean Water Act; and
4. With the Federal Energy Regulatory Commission, for the licensing activities associated with the construction and operation of hydroelectric generating facilities.

Oil and gas regulations are the primary responsibility of the state.

The primary responsibility of the Commonwealth is to continue the administration and enforcement of its laws on the river and in the corridor area. Several Pennsylvania statutory and regulatory authorities are applicable to the Allegheny. Those of particular significance include state water quality certification, Non-pointsource Discharge Elimination System (NPDES) permits, fish and wildlife management laws, threatened and endangered species laws and agreements, forest management laws, soil conservation regulations, mining regulations, solid waste disposal regulations, dam safety and waterway management, hazardous waste facility siting regulations, and pipeline and transmission line siting regulations (see Appendix E). In addition, the Commonwealth of Pennsylvania is also subject to the standards as set forth in the Local Land Management Guidelines, insofar as they are applicable and consistent with state law.

Management responsibilities for water quality, fish and wildlife, and threatened and endangered species are described in other sections of this plan.

The Commonwealth of Pennsylvania shall utilize a state policy to ensure that all state management activities, programs, and reviews be conducted in a manner consistent with, and

supportive of, the Allegheny National Wild and Scenic River legislation and the Management Plan.

Emphasis should focus on, but not be limited to, the following programs and actions:

1. Enter into a cooperative agreement with the Forest Service, whereby the Commonwealth of Pennsylvania will provide guidance, technical assistance and recommendations for the implementation of the Management plan;
2. Continue participation as a voting member of the Northern and Southern Advisory Councils and act as chair of the Southern Advisory Council. The Department of Conservation and Natural Resources representative will also act as a contact person for other state agencies affected by the Allegheny Wild and Scenic River Management Plan;
3. Adoption of the approved River Management Plan as a component of the Pennsylvania Statewide Comprehensive Outdoor Recreation Plan;
4. Continue to inform the Forest Service of applications for State-controlled permits within the river corridor;
5. Continued administration and enforcement of fish management, boating laws, and relevant pollution control laws by the Fish and Boat Commission;
6. Continued administration and enforcement of game and wildlife laws by the Game Commission; continued management of wildlife by the Game Commission, State Forest land by the Department of Conservation and Natural Resources Bureau of Forestry, and fishing access sites by the Fish and Boat Commission;
7. Continued vigorous promotion of its cooperative farm and forest game management program by the Game Commission;
8. Continued administration and enforcement of water quality laws and regulations; timber, mining, and hazardous waste control laws; dams and encroachment permits, submerged lands and water allocation permits; and solid waste control laws by the Department of Environmental Resources;
9. Continued assistance from the Department of Conservation and Natural Resources and the Department of Community Affairs to coordinate for the establishment and maintenance of needed recreational facilities such as river access sites and other recreational enhancements when requested to do so by the private sector, non-profit groups, or other governmental entities, where consistent with local ordinances and with the concurrence of the local township government in which such facilities are proposed to be located;
10. Provision of technical assistance to local governments and private landowners through existing programs of the Department of Conservation and Natural Resources;
11. Continued maintenance of state highways and bridges by the Department of Transportation;
12. Continued assistance in the preservation of historical and archaeological sites by the Historical and Museum Commission;
13. Continued administration and enforcement of wetland and floodplain laws by the Department of Conservation and Natural Resources and the Department of Community Affairs;

MANAGEMENT RESPONSIBILITIES OF THE SECRETARY OF AGRICULTURE



The Forest Service (Allegheny National Forest) will represent the Secretary of Agriculture in managing the Allegheny Recreational River. Federal regulations governing activities by the Forest Service have limited applicability within the Allegheny River corridor. Particular regulations

covering the Forest Service activities are included in Title 36 of the Code of Federal Regulations. These regulations apply on the surface of the river and on lands owned or leased by the agency. They do not apply to private lands in the river corridor.

The specific responsibilities of the Forest Service are:

1. Management of lands, structures, and property owned and/or leased by the Forest Service, and administration of its other management responsibilities in the river corridor, in a manner consistent with the provisions of the Act; in administering its responsibilities the



Forest Service will consider recommendations from the Advisory Councils;

RESPONSIBILITIES OF OTHER FEDERAL AGENCIES

The Wild and Scenic Rivers Act requires any federal agency proposing, conducting, supporting, or regulating significant activities directly affecting the Allegheny Wild and Scenic River corridor to take the following actions:

1. To inform the Secretary of any proceedings, studies or other activities within their jurisdiction that may affect the river, before such activities are commenced or resumed; and
2. No department or agency of the United States may assist by loan, grant, license, or otherwise in the construction of any water resources project that would have an adverse impact on the values for which the Allegheny River was designated.

RESPONSIBILITIES OF THE NORTHERN AND SOUTHERN ADVISORY COUNCILS

2. Continued participation on the Advisory Councils;
3. Consideration and cooperation for the provision of technical assistance to the state, the counties, and towns to enable them to develop and implement programs compatible with the management plan;
4. Coordinate the various monitoring efforts carried out in the corridor and report the results in the annual Allegheny National Forest Monitoring Plan;
5. As the lead agency in administering the Allegheny Wild and Scenic River, the Forest Service will manage the designated sections of the river through formal or informal agreements with the Commonwealth of Pennsylvania, Department of Conservation and Natural Resources, local governments and other organizations wishing to be involved in the management of the river.

The Act for the Allegheny River mandated the formation of the Northern and Southern Advisory Councils. Membership of the Northern Council is set at 9 members, and the Southern Council is at 7 members appointed by the Secretary of Agriculture.

The Advisory councils are to promote long-term protection of the Allegheny Wild and Scenic River by:

1. Stimulating cooperation and coordination among the major players in river management; and
2. Providing a forum for all river interests to discuss and resolve issues.

This type of representative body is indispensable for long-term management because of the complexities of the designated Allegheny River. Given the number of jurisdictions and interests involved in the Allegheny River, no entity can assume sole management responsibility or provide the necessary protection by itself. Furthermore, management decisions by any one

interests. The forum provided by the Advisory Councils will assure communication among all parties and the representation of all viewpoints.

The Advisory Councils will have an advisory role only; they will not have regulatory or land acquisition authority. The Councils primary responsibility is to advise the Secretary of Agriculture (his representative, the Forest Service) on management of the river. They may provide advice to existing entities which have management or regulatory authority over the river, but they do not have the power to dictate actions or decisions to any of those entities.

The Advisory Councils are meant to complement and support the roles and activities of existing interests. They can serve as an effective liaison between these interests and an advocate for river resources.

The Advisory Councils are to remain active for ten years from the date of approval of the Management Plan and they have the following responsibilities:

1. It is recommended that the Northern and Southern Advisory Councils at meet jointly and work together for the benefit of the Allegheny River. Joint meetings should be held at least annually, especially during the early stages of Plan implementation, to ensure consistency with regard to the way the management of the river is approached over it's entire designation.
2. Address river-related issues: Encourage maximum public involvement in the development and implementation of the plans and programs enacted under this legislation; Provide a public forum for the discussion of issues, help raise awareness about issues of particular importance, and stimulate the appropriate authorities to take action. The Councils do not have the authority to resolve any issues directly.
3. Prepare an annual report: Prepare a brief report on the status of the river and the implementation of the management plan. This annual report will be used as part of the monitoring program for the Allegheny

National Forest. This report serves several purposes:

- a) to inform the general public, local officials, the Governor, and Secretary of Agriculture about the condition of the river;
- b) to publicize any pressing needs or issues requiring attention or assistance from the local, state and/or federal governments; and
- c) act as a forum to recognize outstanding contributions in the area of river stewardship.



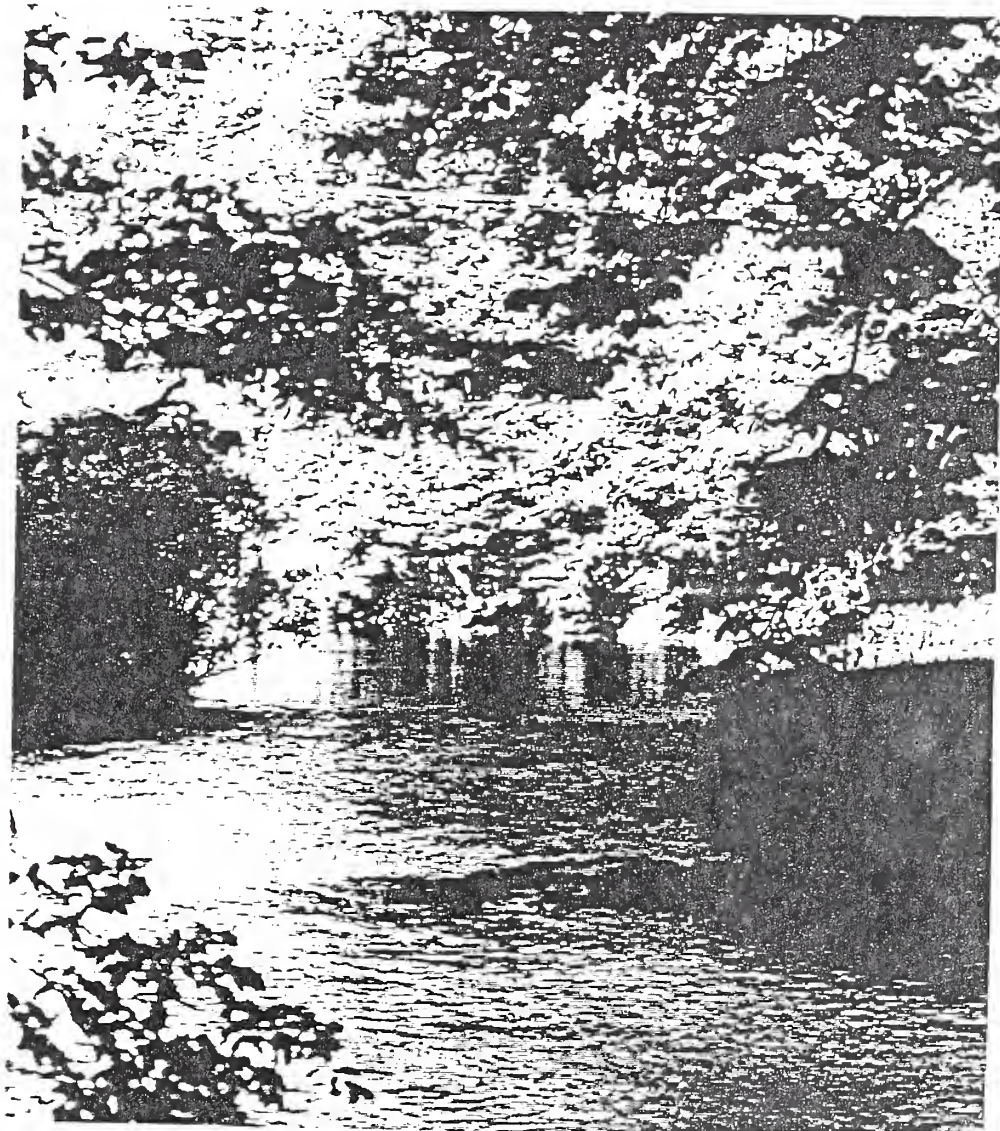
- 4) Stimulate public involvement and education: The Councils will provide opportunities for the public to become aware of, and participate in, efforts to resolve issues that affect the river. This may be accomplished through committees, workshops, newsletters, surveys, mailings or other techniques. The Councils will support the education and outreach activities of its members, other organizations, and, when appropriate, initiate its own projects to educate the public about the Allegheny's special values, the challenges confronting it, and sensible techniques for conserving it. In performing these activities, the Councils should reach out to a broad cross-section of the public, including recreation users, visitors to the Allegheny River corridor, elected and appointed officials at all levels of government, agency staff, riverfront landowners, and other local residents. Development of committees to assist the

Councils in their undertakings will be of vital importance. Committees could include: heritage resources, river

conservation and zoning, education, water quality, habitat enhancement, and community development.

MONITORING

The following actions will be taken as part of the implementation of Alternatives 1, 2 or 3. Monitoring and evaluating the implementation process and effects will determine how well the Management Plan objectives are being met and Monitoring and evaluation will be used to check for trends of environmental improvement, degradation, how closely standards and guidelines are being met and how well the Management Plan objectives are being met. Significant changes may trigger an administrative review and re-evaluation of the Management Plan.



MONITORING PLAN ALLEGHENY WILD AND SCENIC RIVER

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	UNIT OF MEASUREMENT/ ACCURACY	RESPONSIBLE AGENCY	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Monitor implementation of objectives	Objectives	Meet 10 year management plan objectives	Annual summary	Objectives	USFS, DCNR	Annually	
Changes in land use	Land uses within the river corridor	Develop baseline of land uses in the river corridor to include: business and industry, residential, agriculture, farming	Videography, aerial photo interpretation and GIS, field checks	Acres of change	USFS, DCNR	Baseline and every 5 years	
Riparian area health		Is the health of the riparian area being maintained?	Permanent plots/vegetative	Species richness and abundance	USFS /partners	Baseline then every 5 years	How is development and river management affecting these plots?
Recreation	ROS in the upper and lower river	Maintain and/or improve character of rec setting	"sample sites" inventory - ROS	Acres of ROS by sample site	USFS	5 year intervals	Change in ROS from existing
	Use	Use levels	Field observations, car counts, transects	RVD's	USFS/DCNR	Annually	Change from predicted use

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	UNIT OF MEASUREMENT/ ACCURACY	RESPONSIBLE AGENCY	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Recreatin cont.	User satisfaction, including landowners	Satisfied users	Complaints, user contacts, letters, surveys	Surveyed # of users	USFS/DCNR	Annually	Increasing # of campsites, drop-in
Dispersed camping on islands and shoreline	Undeveloped sites	Develop "Levels of Acceptable Change" for dispersed camping	Site visits	Area impacted - loss of vegetation, soil compaction and erosion	USFS	Baseline and then every 3 years	Exceeds developed standards in Levels of Acceptable change
Visual	Landscape types and condition	Maintain landscape type character	Sample site inventory	Acres by type	USFS	every 5 years	Acres not meeting "type character"
Fisheries & watershed	Water quality - Allegheny French Creek Brokenstraw Creek	DER Chap 93 standards	Established protocols @ established Water Quality Network stations	Varies with parameter measured	DCNR	As set by DCNR (currently once a month; by mid-1995, it's anticipated that sampling will be bimonthly)	Deviation from standards
Fisheries & watershed	Invertebrates - Allegheny French Creek Brokenstraw Creek	Non-impairment	Established protocols @ established Water Quality Network stations	Varies with parameter measured	DCNR	As set by DCNR	Deviation from standards
	Fish population	Sustainable fisheries: viable population	Accepted methodologies	Species abundance and diversity	PF&BC	As set by PFBC	Downward trend in population

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	UNIT OF MEASUREMENT/ ACCURACY	RESPONSIBLE AGENCY	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Heritage Resources	Prehistoric/ historic archaeological sites, historic structures, districts	Determine condition and maintain integrity	Heritage resource surveys, site visits, landowner contacts	# of sites and degree of integrity	USFS	Baseline and every three years on selected sites (stagger sites to be monitored; National Register or National Register Eligible sites as needed)	Deviation from standards
Wildlife	Eagles	Protect nest sites and maintain foraging areas	Aerial and ground surveys	Acres and nest sites	USFWS, USFS, PGC	Ground - annually; aerial - every 5 years	Sites disturbed, foraging areas maintained
	Ospreys	Protect nest sites and maintain foraging areas	Aerial and ground surveys	Acres and nest sites	USFS, PGC	Ground - annually; aerial - every 5 years	Sites disturbed, foraging areas maintained
	Hérons	Protect rookeries and maintain foraging areas	Ground surveys	Acres and nest sites	USFS, PGC	Ground - every 5 years	Sites disturbed, foraging areas maintained
Wildlife	Mussels	Protect known populations and habitat	Underwater searches	Sites affected	USFWS, USFS, PFBC	Fill data gaps to establish baseline; monitor populations at 10 year intervals	Known or potential sitee disturbance
Encroachment in Threatened and Endangered species habitat	Eagle nest sites, mussel habitat	Maintain habitat integrity and prevent adverse impacts on the species	Videography, aerial photos, GIS, field checks, ground surveys	Sites affected	USFWS, USFS, PGC, PFBC	Whenever actions are proposed that may affect these species or their habitat	Potential effect to species or its habitat

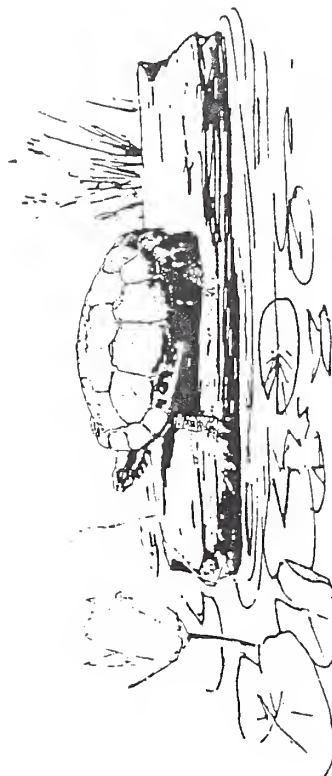
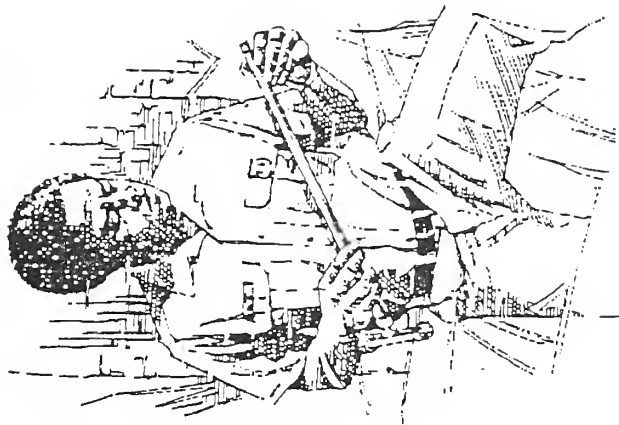
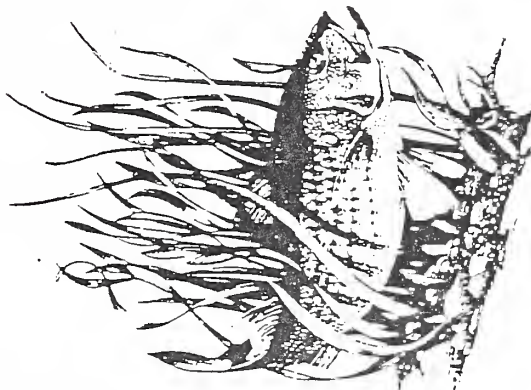
FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	UNIT OF MEASUREMENT/ ACCURACY	RESPONSIBLE AGENCY	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Re-introduction of native species (eg. otters, ospreys)	Acres of habitat used	Establish viable population	Explicitly stated in re-introduction plan	# of animals released; successful breeding adopted	USFS, PGC	TBD; Explicitly stated in re-introduction plan	Trend indicating population decline or inability to establish viable population

USFS US Forest Service
 DCNR Pennsylvania Department of Conservation and Natural Resources
 PFBC Pennsylvania Fish and Boat Commission

USFWS US Fish and Wildlife Service

PGC Pennsylvania Game Commission

TBD To be decided



PLAN IMPLEMENTATION

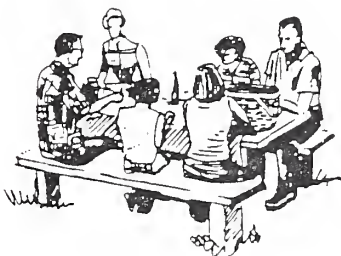
Implementation is the process used to achieve, on the ground, the future conditions and management direction described in the Management Plan. An integrated resource management approach will be used to assure interdisciplinary teamwork and public involvement throughout the process.

ACTIVITY	ACTIONS	WHEN
ADMINISTRATION		
A.1	Develop and administer a cooperative agreement with Pennsylvania Department of Environmental Resources (PA DER) and others as needed to implement the Allegheny Wild and Scenic River Management Plan between Franklin and Emlenton	Following Plan Approval
A.2	Carry out chairperson responsibilities on the Northern Advisory Council, and participate as a member of the Southern Advisory Council	Ongoing
A.3	On-the-ground administration will be conducted by the ANF Ranger Districts or cooperators, based on the location of the river segments.	Following Plan Approval
A.4	Carry out river monitoring as stated in the Monitoring Section of the Allegheny Wild and Scenic River Management Plan and include as part of the Annual Forest Monitoring Report	Begin in FY 96
A.5	Contact regulatory or law enforcement agencies when violations are observed or complaints are received. Coordinate meetings as needed to resolve identified problems.	Ongoing
A.6	Place emphasis on promoting cooperative funding, cost-share agreements, partnerships and volunteerism with the private sector and other agencies for the management of the Allegheny Wild and Scenic River.	Following Plan Approval
A.7	Work with US Army Corps of Engineers (COE) so that the COE provides information to river users and riparian landowners concerning significant water level changes and the reason for those changes.	Ongoing
A.8.	Respond to federal and state agency requests for review and comment on project proposals requiring agency permits. Monitor General Permit program administered by County Conservation Districts.	Ongoing
A.9	Meet with the PA Department of Transportation periodically to coordinate maintenance activities within the river corridor.	Begin FY 96
RECREATION MANAGEMENT		
R.1	Manage dispersed use of Allegheny Islands Wilderness under Limits of Acceptable Change concept. Map and record other dispersed campsite locations on public land.	Begin FY 96

ACTIVITY	ACTIONS	WHEN
RECREATION MANAGEMENT CONT.		
R.2	Pursue cooperative agreement with Pennsylvania Fish and Boat Commission (PA FBC) to maintain minimum level access sites.	Begin FY 96
R.3	Implement a "Pack In/Pack Out" emphasis through a river brochure and other public information. Explore opportunities for partnerships to provide litter prevention messages (i.e., messages on litter bags).	FY 96
R.4	Add Allegheny Wild and Scenic River recreation improvement projects to the Forest capital investment list(i.e., Tanbark and Indian Valley Sites).	Following Plan Approval
R.5	Coordinate and cooperate with private landowner, public agencies or entrepreneurs wanting to provide public recreational facilities or services in the designated river corridor (i.e., access sites in the area of President, Kennerdell and Emlenton).	Following Plan Approval
R.6	Cooperate with Allegheny Valley Trails Association (AVTA) and A-C (Allegheny-Clarion) Valley Development Corp. in their effort to establish rails-to-trails in the designated river corridor between Franklin and Emlenton. Cooperate with other Rails-to-trails efforts to determine trail feasibility in the designated river corridor.	Following Plan Approval
R.7	Coordinate and cooperate with the North Country Trail group to investigate ways of providing sufficient trailhead parking and information dissemination for users of the Tanbark Trail, a spur of the North Country Trail.	Following Plan Approval
INFORMATION AND EDUCATION		
IE.1	Develop an Allegheny Wild and Scenic River brochure to provide information for recreation users, to promote responsible use of public lands and to encourage respect for private property.	Design in FY 95 Publish in FY 96
IE.2	Work with the Pennsylvania Fish and Boat Commission to identify and make available to out of area visitors convenient locations for purchasing boat registrations.	Following Plan Approval
IE.3	Develop a sign plan for the designated segments of the Allegheny Wild and Scenic River that adequately identifies public lands and access areas. Coordinate with other signing efforts along the river corridor (Oil Region Heritage Park, Allegheny Valley Trails Association, Cranberry Township and Tidioute Area Development Association).	By FY 98
IE.4	Provide Allegheny Wild and Scenic River Information at Forest Service administered sites, Tionesta Information Center, Kinzua Dam interpretive Center, and tourist promotion agencies.	Begin FY 96
IE.5	Make available to the public the Allegheny Wild and Scenic River Management Plan.	Following Plan Approval
IE.6	Work with other agencies to provide information on riparian management, bank stabilization, and design concepts for development within the designated river corridor.	Ongoing

ACTIVITY	ACTIONS	WHEN
INFORMATION AND EDUCATION cont.		
IE.7	In cooperation with Pennsylvania Department of Transportation (PENN-DOT), Place National Wild and Scenic River System signs at six bridge crossings.	Following Plan Approval
SOIL AND WATER		
SW.1	Coordinate an annual river clean-up in conjunction with state and national efforts.	Ongoing
S & W.2	Respond to public requests to participate in volunteer water quality monitoring by cooperating with the PA DER monitoring program.	Begin FY 96
SW.3	Work with PENN-DOT and Townships to discuss non-degrading road maintenance practices.	Begin FY 96
SW.4	Work with PENN-DOT to enhance the appearance of maintenance yards in the river corridor.	Begin FY 96
SW.5	Work with private landowners and municipalities to remove illegal dumps in the designated river corridor.	Begin FY 96
SW.6	Cooperate with National Resource Conservation Service (formerly SCS), PA DER and US Office of Surface Mining to mitigate acid mine drainage in the Scrubgrass watershed.	Ongoing
FISH AND WILDLIFE		
FW.1	Cooperate with Pennsylvania Game Commission (PGC) biologists to monitor and protect eagle nesting sites.	Ongoing
FW.2	Cooperate with USDI Fish and Wildlife Service monitoring of federally listed threatened, endangered and sensitive species.	Ongoing
HERITAGE RESOURCES		
HR.1	In cooperation with the Pennsylvania Historic and Museum Commission (PHMC), Pennsylvania Archaeological Society and landowners, coordinate the updating and completion of site surveys for potentially significant heritage resource sites in the designated River Corridor.	Following Plan Approval
HR.2	Cooperate with citizen efforts to nominate to the National Register of Historic Places the timber crib dam at Tionesta.	Begin in FY 96
HR.3	Work with landowners and townships to implement a site stewardship agreement to protect and interpret Indian God Rock and Rockland Furnace.	Begin in FY 96
HR.4	In cooperation with the PHMC and PENN-DOT, move existing highway historical markers to locations where vehicles can pull off the highway to read markers safely.	Begin in FY 96

ACTIVITY	ACTIONS	WHEN
LAND OWNERSHIP AND USE		
LOU.1	Work with municipalities wishing to establish river conservation measures for the designated river corridor.	Following Plan Approval
LOU.2	If an identified river value becomes threatened, work with the entity responsible to reach an agreement whereby that resource is protected.	Following Plan Approval
LOU.3	Monitor development of proposed access sites. Where a need continues to be unmet, develop a plan to provide the access.	Following Plan Approval
LAW ENFORCEMENT		
LE.1	Conduct at least annual meetings with law enforcement agencies having jurisdiction in the designated river corridor to resolve law enforcement issues.	Following Plan Approval
LE.2	Work with law enforcement and regulatory agencies to provide information and user-friendly contacts to increase public awareness and compliance with existing laws and regulations.	Following Plan Approval



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APPENDIX B
GLOSSARY

APPENDIX B

GLOSSARY

Access Site - A developed or undeveloped area providing legal entry to the water. The site may be served by road or trail.

Administrative - Management functions belonging to agency personnel.

Advisory Councils - The Northern and Southern Advisory Councils were established by the Allegheny Wild and Scenic River Act, Section 2. Their function was to provide advice on establishment of final corridor boundaries and the management of the river. Council members are appointed as directed by the Act: one each from the Forest Service and the Pennsylvania Department of Environmental Resources, members representing county commissioners and riparian landowners, and a representative of a non-profit conservation group. Council members are to serve a term of 3 years, and the Councils will cease to exist 10 years after the passage of the Act (4/20/92). Each Advisory Council submitted a list of objectives and recommendations for river management (See Appendix D). They also provided information and recommendations concerning corridor boundaries.

Aggregate - Hard, inert materials such as sand, gravel or crushed stone used for mixing with a cementing material to form concrete, mortar or plaster. Can be used alone for ballast or graded fill.

Alluvium - A general term for unconsolidated material deposited by a stream or other body of running water.

Aquatic - Living or growing in or near the water.

Archaeological Resources Protection Act (ARPA) - Public Law 96-95, 16 USC 470a, passed in 1979, requires a permit for any excavation or removal of archaeological resources from public or Indian lands. Excavations must be undertaken for the purpose of furthering archaeological knowledge in the public interest, and resources removed remain the property of the United States.

Bench - A narrow shelf of ground. -

Best Management Practices (BMP) - A practice or combination of practices that is determined by a State (or designated wide-area planning agency) after problem assessment, examination of alternative practices, and appropriate public participation to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals.

Biodiversity - The diversity of life in an area, including the diversity of genes, species, plant and animal communities, ecosystems and the interaction of these elements. Biological diversity refers to the variety and variability among living organisms and the ecological complexes in which they occur.

Boating - Includes the use of both inflatable water craft and hardboats which are motorized or propelled and/or steered by paddles. Such crafts include, but are not limited to, rafts, kayaks and canoes. Boating does not include the use of various water toys such as inner tubes and other small flotation devices.

Carrying Capacity (recreation) - The concept of recreational carrying capacity is based on the principal that there are limits to the number of visitors a given site can accommodate. In other words, carrying capacity is the level of use a renewable resource can withstand and still remain productive. Aside from the limits which a resource can withstand, there are also limits which recreationists can withstand. For example, someone seeking a semi-primitive experience would probably be dissatisfied if he or she encountered large groups of people hiking along a trail.

Colluvium - A general term for unconsolidated material deposited by rainwash, sheetwash or downslope creep, generally collecting at the base of slopes or hillsides.

Concern - An apprehension or point of dispute involving a resource management activity or land use where the relationships between the activity or use and undesirable results is not well defined.

Constraint - Limitation; action which cannot be taken or which must be taken.

Corridor (Allegheny National Wild and Scenic River Corridor) - That section of land on either side of the designated river segments extending landward from the high-watermark which averages 320 acres per river mile, and defines where the Allegheny Wild and Scenic River Act is applicable.

Cultural Resources (Heritage Resources) - The tangible and intangible aspects or cultural systems, living or dead, that are valued by a given culture or which contain information about the culture. Cultural resources include but are not limited to sites, structures, buildings, district and objects associated with or representative of people, cultures and human activities and events. Cultural resources are commonly discussed as prehistoric and historic values, but each period represents a part of the full continuum of culture values from the earliest to the most recent.

Developed Recreation Site - A relatively small, defined area where facilities are provided for concentrated public use (e.g., campgrounds, picnic areas, etc.).

Developed Recreation - Outdoor recreation which occurs within an area where constructed and maintained facilities are provided.

Dispersed Recreation - Outdoor recreation which occurs outside of constructed and maintained recreational facilities (e.g., scenic driving, hunting, hiking, cross-country skiing, etc.). Visitors engaging in a variety of activities of enjoyment or refreshment and spread widely over large areas of public lands. Activities are less structured and settings are less developed.

Draft Environmental Impact Statement (DEIS) - See Environmental Impact Statement.

Draft Implementation Plan - See Implementation Plan.

Easement - A right of use over the property of another; it allows the easement holder specified uses or rights without actual ownership of the land.

Ecological - Of or relating to the relation between organisms and their environment.

Ecosystem - The interacting system of a biological community and its non-living surroundings.

Endangered Animal Species - Any animal specie in danger of extinction throughout all or a significant portion of its range. This definition excludes species of insects that the Secretary of Interior determines to be pests and whose protection under the Endangered Species Act of 1973 would present an overwhelming or overriding risk to humans.

Endangered Plant Species - Species of plants in danger of extinction throughout all or a significant portion of their ranges. Existence may be endangered because of the destruction, drastic change or severe curtailment of habitat or because of over-exploitation, disease, predation or even unknown reasons. Plant species from very limited areas (e.g., the type localities only, or from restricted fragile habitats) usually are considered endangered. See also Threatened Plant Species.

Environmental Analysis - An analysis of alternative actions and their predictable short- and long-term environmental consequences.

Environmental Assessment - A concise public document required by the regulations implementing the National Environmental Policy Act that briefly provides sufficient evidence and analysis for determining

whether or not to prepare an Environmental Impact Statement or a Finding of No Significant Impact.

Environmental Impact Statement - A statement of the environmental effects which would be expected to result from proposed alternative management actions.

Erosion - The detachment and movement of soil from the land surface by wind, water or gravity.

Fee Purchase - The acquisition of legal title to real property either in its unencumbered state or subject to outstanding third-party interests. Also referred to as fee simple acquisition or the acquisition of a fee simple ownership interest in real property.

Final Environmental Impact Statement (FEIS) - See Environmental Impact Statement.

Flood plain - That portion of a river valley, adjacent to the river channel, which is built of sediments during the present regime of the stream and which is covered with water when the river overflows its banks at flood stages.

Fluvial Erosion - Erosion caused by the action of rivers.

Forest Land and Resource Management Plan - The planning document which provides management direction for a given National Forest.

Forest Service Policy - Policy set by the Forest Service Manuals and specific National Forest Land and Resource Management Plans.

Goal - A concise statement that describes a desired condition to be achieved sometime in the future. It is generally expressed in broad, general terms and usually does not have a specific date for completion.

Habitat - The sum of environmental conditions of a specific place that is occupied by an organism, a population or a community. A specific set of physical conditions that surround the single species, a group of species or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover and living space.

Headwater Streams - The source and upper reaches of rivers.

Herbaceous - Annual, biennial or perennial plants (e.g. grass, ferns) with no persistent, woody parts.

Heritage Resources - Cultural and historic resources, including : the physical remains of sites, structures or objects used by humans in the past. Heritage resources may be historic, prehistoric archaeological, or architectural in nature, and may, in some cases, be grouped into districts on the basis of shared characteristics.

Incompatible Use - Use of the area within a National Wild and Scenic River corridor that conflicts with the objectives of the Wild and Scenic Rivers Act.

Integrated Pest Management - A comprehensive systems approach to achieving economical pest control in an environmentally safe manner. The individual components of integrated pest management in forestry include cultural, mechanical, manual, prescribed fire, biological, chemical and regulatory means.

Intermittent Streams - A stream or portion of a stream that flows only in direct response to precipitation. It receives little or no water from springs and no long-continued supply from melting snow or other sources. It is dry for a large part of the year, ordinarily more than 3 months.

Interpretive Services - Activities and displays that interpret the natural and social history of the National Forest environment of the visiting public and informs them about National Forest goals, programs and services.

Interpretation - The act of interpreting the natural and social history and informing the visiting public.

Indicators - Specific variables that, singly or in combination, are taken as indicative of the condition of the overall opportunity class. These variables allow the manager to unambiguously define desired conditions and to assess the effectiveness of management practices.

Limits of Acceptable Change (LAC) - The human caused change to biophysical or social components which is tolerable, without the loss of desired wilderness conditions, as described in the Wilderness Act [16 U.S.C. 1131 Sec.2)(c)].

Management Direction - A statement of multiple-use and other goals and objectives, the management prescriptions, associated standards and guidelines, and action plans for attaining them.

Meander - One of a series of regular, freely developing sinuous curves, bends, loops, or windings in the course of a stream. It is produced as a stream ages and swings from side to side as it flows across its flood plain or shifts its course laterally toward the convex side of an original curve.

Minimal - The least quantity assignable, admissible or possible.

Mitigate - Actions to avoid, minimize, reduce, eliminate or rectify the adverse impacts of a management practice.

National Environmental Policy Act (NEPA) - The 1969 Act of Congress that represents a basic national charter for protection of the environment.

National Register of Historic Places - A listing maintained by the U.S. Department of Interior - National Park Service of areas that have been designated as historically significant. The National Register includes places of local and state significance as well as those of value to the nation.

Native Species - Any species of flora or fauna that naturally occurs in the United States and that was not introduced by humans.

Natural Appearing - A human-made structure or development that blends into the natural surroundings. It will integrate visually into the existing landscape.

Orphan Wells - An abandoned well unclaimed by an owner.

Outstandingly Remarkable Values - For the purposes of river classification, values that are comparatively rated far greater than similar values on other rivers within the same region.

Partial Interest - An interest in real property which is less than a fee simple interest or ownership. Examples include scenic easements, roadway easements, etc.

Perennial Stream - A stream that flows throughout the year from source to mouth.

Plateau - A level or horizontal region at a considerable height above sea level or the surrounding regions.

Policy - A guiding principle upon which a specific decision or set of decisions is based.

Pro-active management - Initiating and being involved in the control of decisions.

Project - An organized effort to achieve an objective identified by location, activities, outputs, effects, and time period and responsibilities for execution.

Proclamation Boundary - The exterior boundary line surrounding the area within which are lands formally designated or proclaimed as a National Forest by Presidential Proclamation, Act of Congress or other authority.

Public Involvement - A Forest Service process designed to broaden the information base upon which agency decisions are made by 1) informing the public about Forest Service activities, plans and decision, and 2) encouraging public understanding about and participation in the planning processes which lead to final decision-making.

RVD - Recreation Visitor Day - Recreational use of National Forest System land which aggregates 12 hours. It may consist of one person for 12 hours, two people for 6 hours or any combination.

Rare Species - Any plant or animal that, although not presently threatened with extinction, if in such small numbers throughout its range that it may be endangered if its environment worsens; the "rare" category is a State, not Federal, category.

Reactive Management - Decisions made in response or reaction to external actions or conditions.

Recreation Opportunity Spectrum (ROS) - The Recreation Opportunity Spectrum (ROS) is a land management tool which the Forest Service uses to classify lands into different recreation settings (1968 ROS Book) and, thereby, provide management direction for specific forest areas. The ROS provides a framework for stratifying and defining classes of outdoor recreation environments, activities and experience opportunities and takes into consideration several factors, or "setting indicators", when classifying an area of land. Those factors include remoteness, access, naturalness, facilities and site management, social encounters, visitor impacts and visitor management.

Residuum - Residue; something remaining after the removal of a part.

Resource - Anything which is useful for something, be it animal, vegetable, or mineral, a location, a labor force, etc. Resources, in the context of land use planning, thus vary from such commodities as timber and minerals to such amenities as scenery or scenic viewing points.

Riparian - Areas of transition between rivers, streams, or other water bodies and adjacent uplands (Brooks, R., et. al. 1993. Wetlands and Wildlife. Pennsylvania State University).

Riparian Area (Zone) - Riparian areas form a natural buffer between a stream or other body of water and a drier upland area. These areas often occur as strips of vegetation (ibid.).

Riparian Ecosystem - The transition area between the aquatic ecosystem and terrestrial ecosystem, identified by soil characteristics and distinctive vegetation communities that require free or unbound water.

River Classification - Eligible river segments are classified according to the extent of evidence of human activity as one of the following:

"Wild" river areas - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watershed or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

"Scenic" river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shoreline largely undeveloped, but accessible in places by roads.

"Recreational" river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines and that may have undergone some impoundment or diversion in the past.

Riverine - Of or relating to a river.

ROS Classes - The settings, activities and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into six classes. The system has application to all lands regardless of ownership or jurisdiction. However, not all classes of activity would necessarily exist on all land. The six general classes are:

Wilderness - managed to preserve naturalness and solitude. Timber harvests, road construction and mining activities are generally prohibited.

Semi-Primitive (motorized or non-motorized) - largely unmodified natural environments that contain at least 2,500 non-roaded acres. These areas provide good to moderate opportunity for isolation. They may be managed for either motorized or non-motorized recreational uses.

Roaded Natural - managed for only moderate resource utilization and presence of people. These areas include less than 2,500 acres of non-roaded forest and allow for both social interaction and moderate isolation.

Rural - areas characterized by a substantially modified natural environment where sights and sounds of people are evident.

Urban - areas characterized by high social interaction and significant modification of the natural environment such as city parks.

Developed - managed as small, distinctly defined areas where facilities are provided for concentrated public use such as campgrounds, picnicking and swimming.

Scenic Easement - As defined in Section 15 of the Wild and Scenic Rivers Act, "The right to control the use of land (including the airspace above such land) within the authorized boundaries of a component of the Wild and Scenic Rivers System for the purpose of protecting the natural qualities of a designed wild, scenic or recreational river."

Scoping - The procedure by which the Forest Service determines the extent of analysis necessary for an informed decision on a proposed action. Scoping is an integral part of environmental analysis. Depending on the complexity and nature of the action, scoping varies from a brief consideration of a few pertinent factors in a proposed action that may be categorically excluded to full compliance with the Council of Environmental Quality direction for a proposed action that must be documented in an environmental impact statement.

Sensitive Species - Species that have appeared in the Federal Register as proposed additions to the endangered or threatened species list and those that are on an official state list or are recognized by the Regional Forester as needing special management in order to prevent them from becoming endangered or threatened.

Seral - Of, relating to, or characteristic of an ecological community.

Species - A fundamental category of plant or animal classification.

Standard - Measurable aspect of indicators which provide a base against which a particular condition can be judged as acceptable or not.

Subsurface Rights - Rights of use pertaining to the subsurface (mineral) ownership.

Surface Rights - Rights of use pertaining to the surface (land) ownership.

Threatened Specie - Any specie which is likely to become endangered within the foreseeable future and which has been designated in the Federal Register as a threatened specie.

Threatened Animal Specie - Any animal specie likely to become endangered within the foreseeable future through all or a significant portion of its range.

Threatened Plant Specie - Any plant specie likely to become endangered within the foreseeable future through all or a significant portion of its range, including species categorized as rare, very rare or depleted.

Trailhead - The parking, signing and other facilities available at the beginning of a trail.

Tributaries - Secondary or branch of a stream, drain, or other channel that contributes flow to the primary or main channel.

Understory - Low-growing vegetation (e.g., grasses, shrubs or small trees) growing under a stand of trees. Also, that portion of trees in a forest stand below the overstory.

Upland - The higher ground of a region, in contrast with a valley, plain, or other low-lying land.

Visual Resource - The composite of basic terrain, geologic features, water features, vegetative patterns, and land use effects that typify a land unit and influence the visual appeal the unit may have for visitors.

Watershed - The entire area that contributes water to a drainage system or stream.

Wetlands - Areas that are inundated by surface or ground water with a frequency sufficient to support and that under normal circumstances support or would support a prevalence of vegetative or aquatic life that required saturated and seasonally-saturated soil conditions for growth or reproduction.

Zoning - Municipal planning whereby different sections are devoted to different purposes (residential, industrial, etc.).

APPENDIX C

ALLEGHENY WILD AND SCENIC RIVER CORRIDOR MAPS

Corridor Boundary



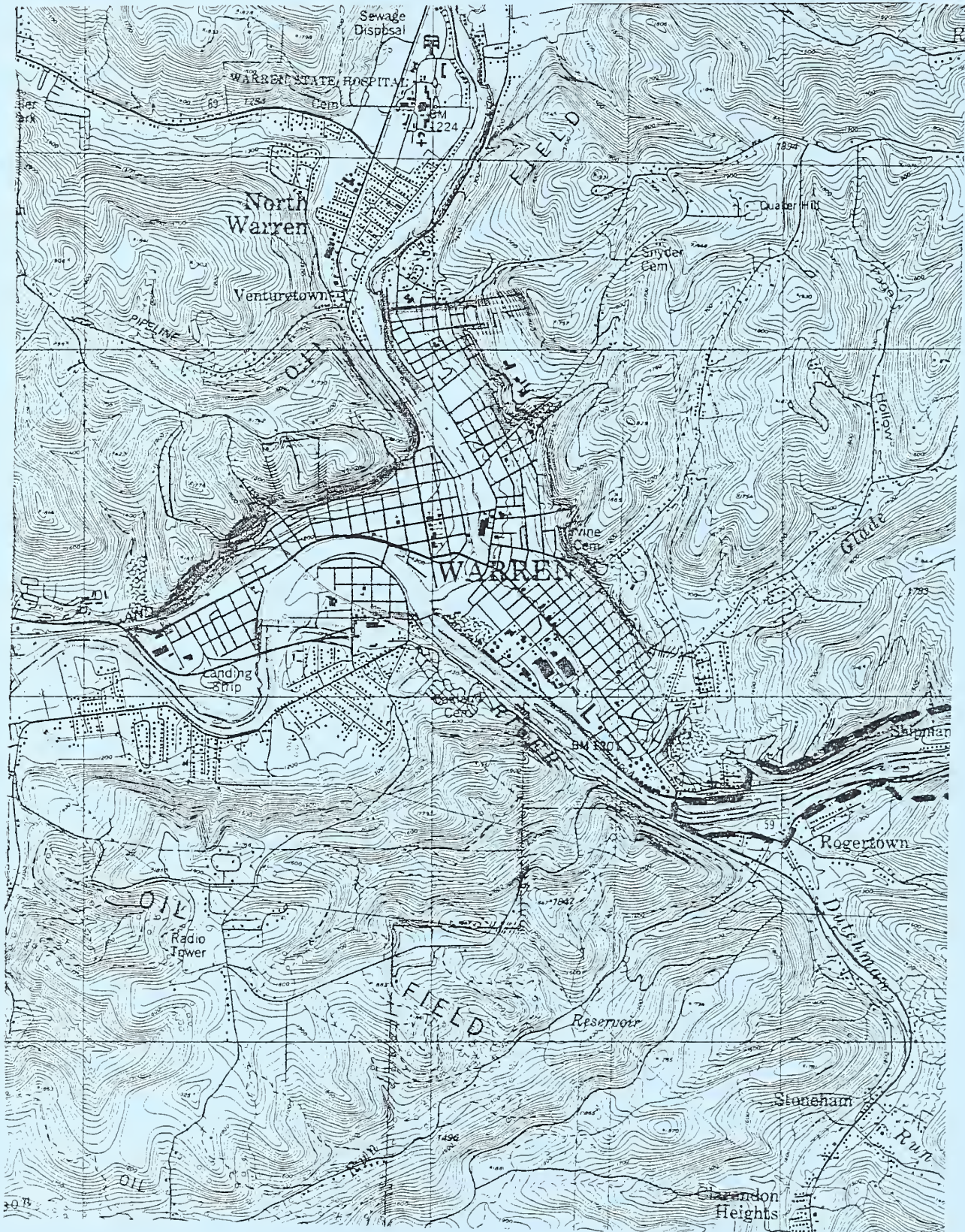
Scale 1:50,000

Corridor Boundary

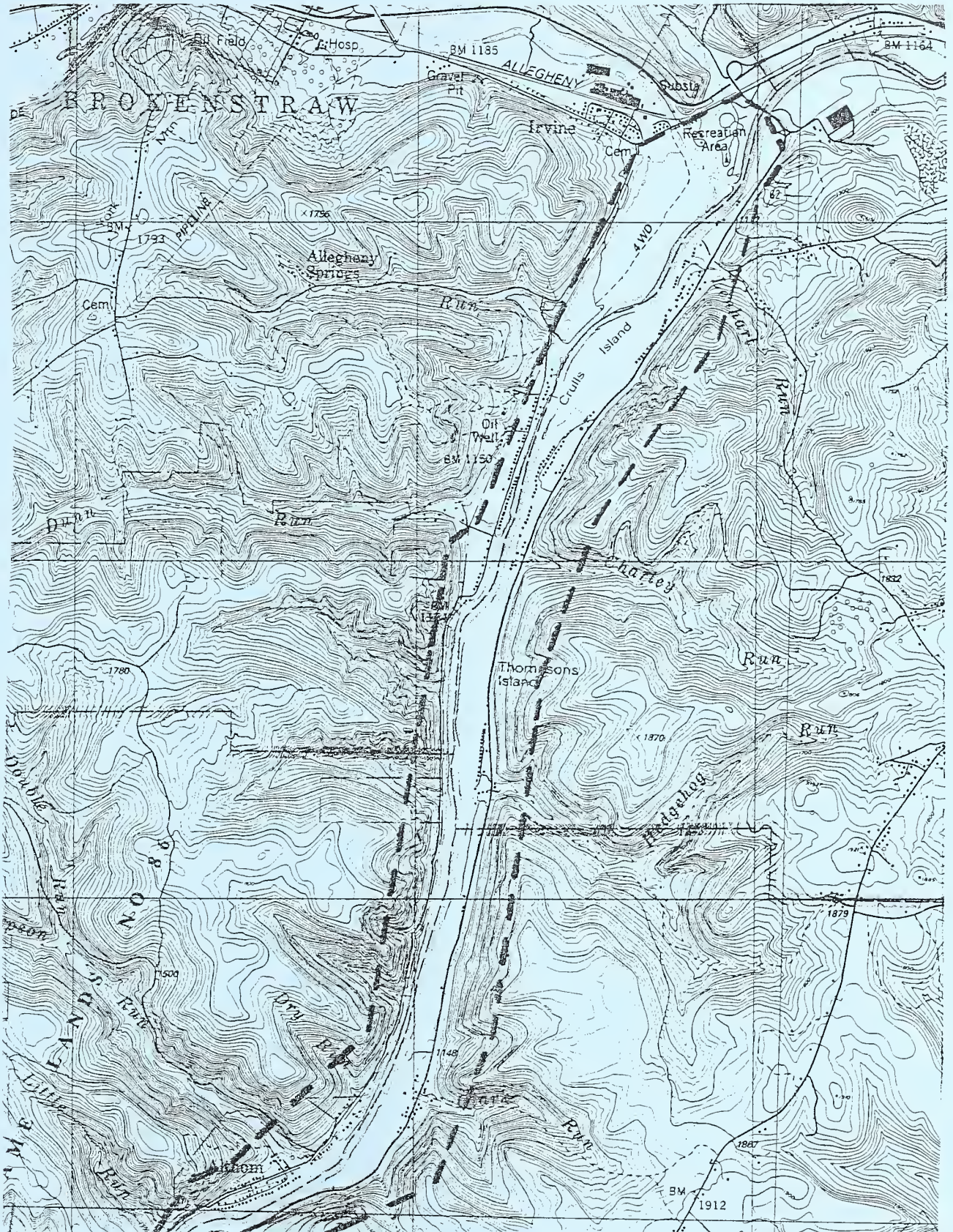
MAP A



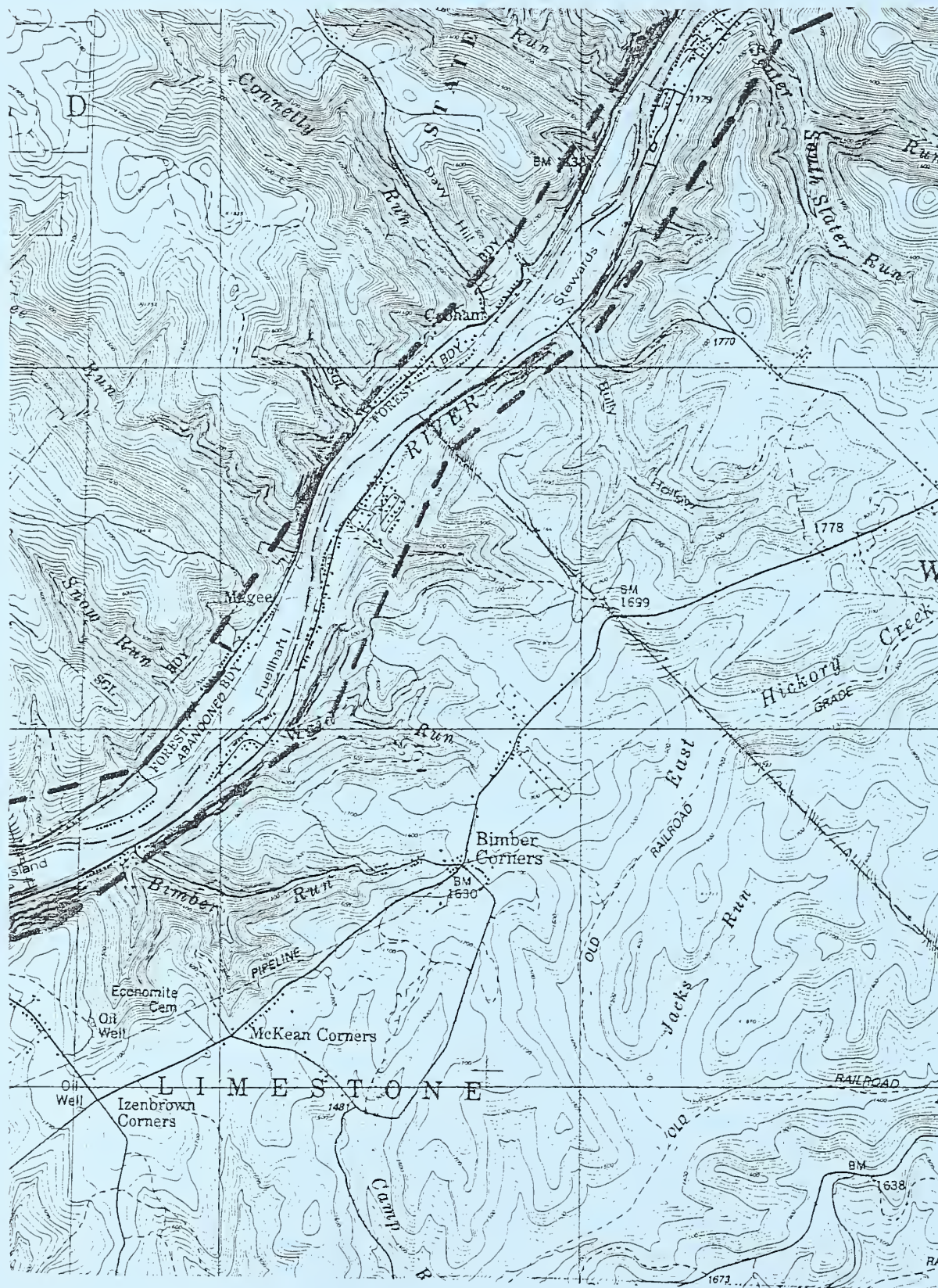
MAP B



MAP C



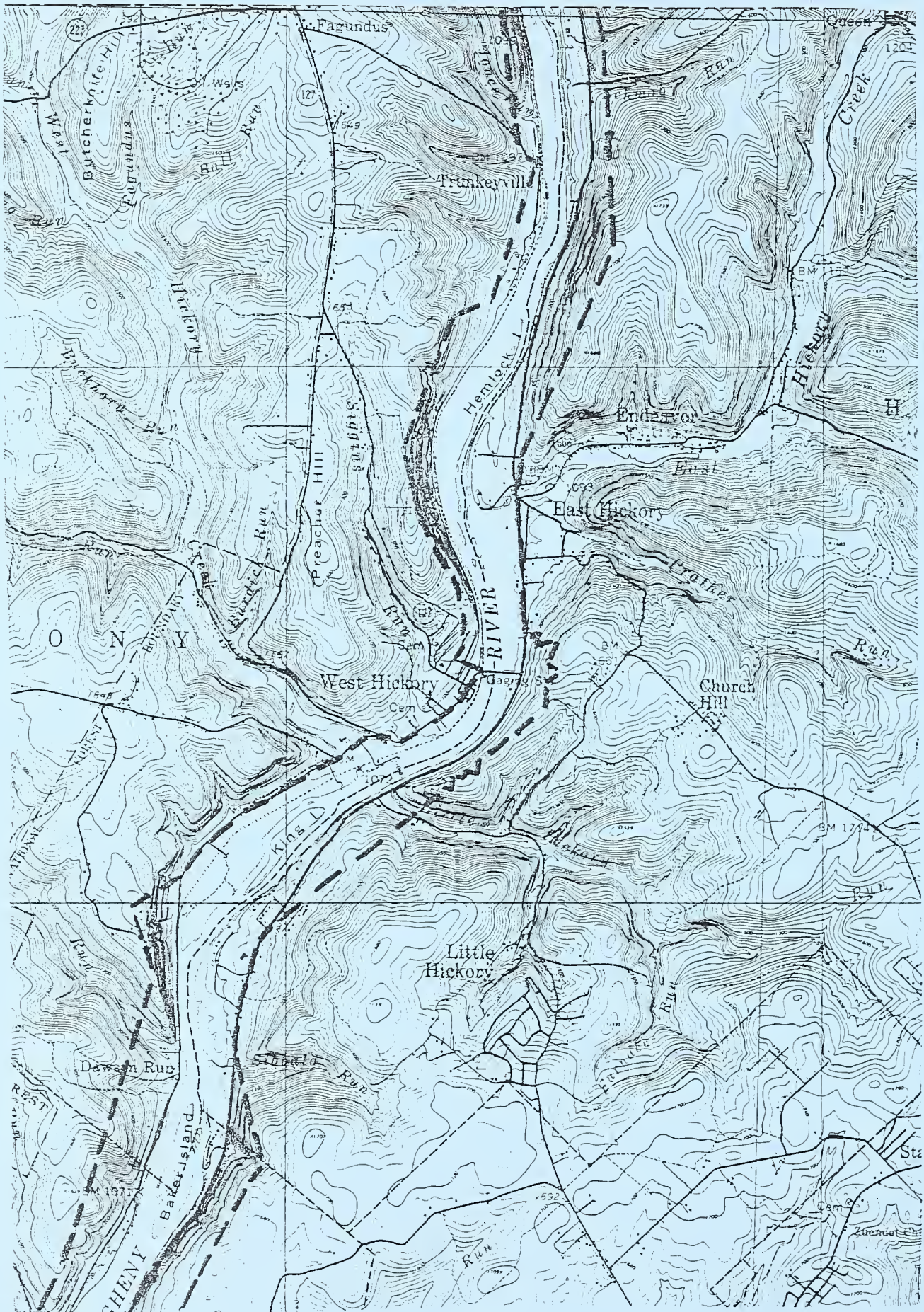
MAP D



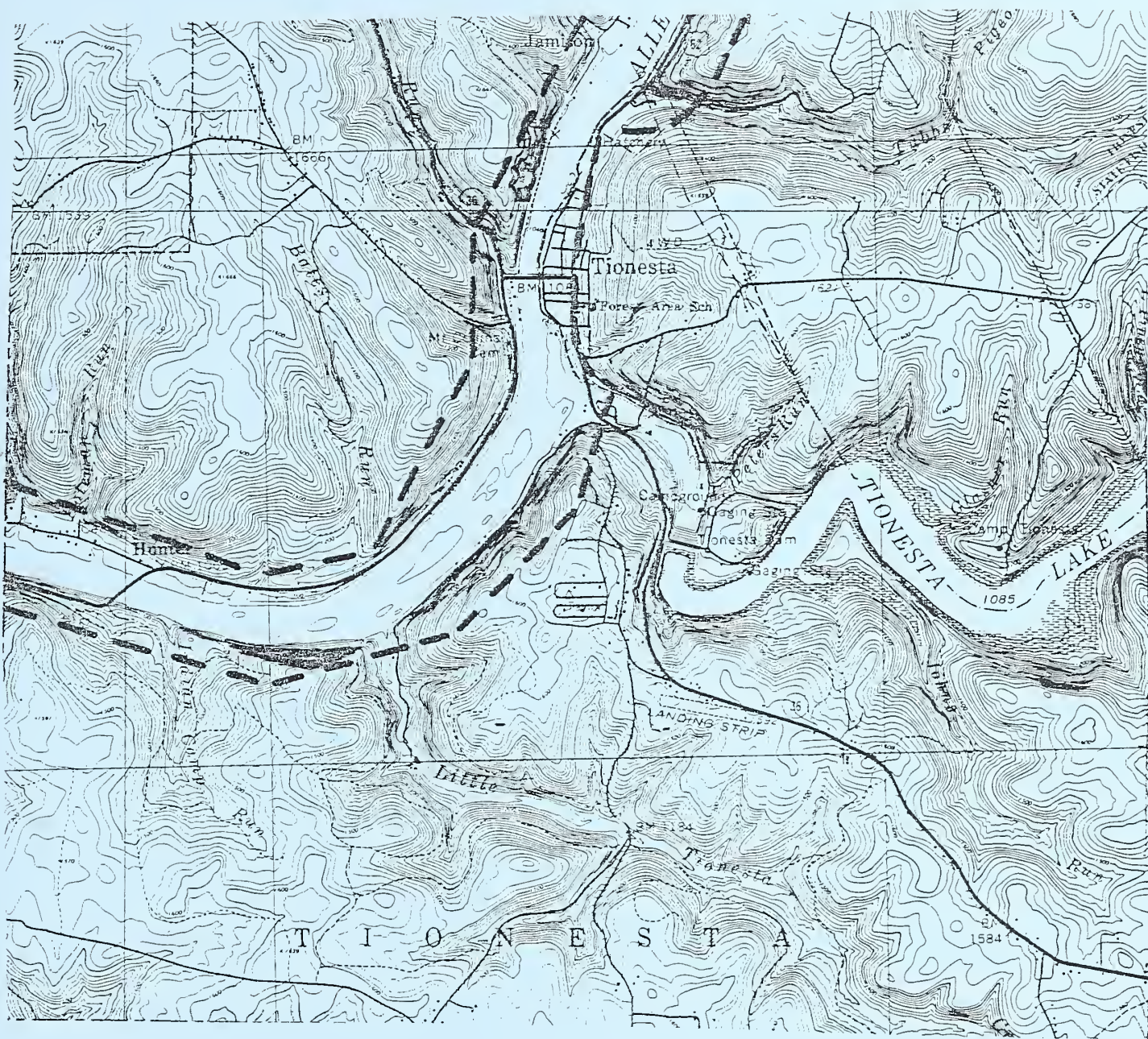
MAP E



MAP F



MAP G



MAP H



MAP I



MAP J



MAP K



MAP L



APPENDIX D

ALLEGHENY RIVER LEGISLATION

P.L. 102-271

Apr. 20, 1992

(S. 606)

To amend the Wild and Scenic Rivers Act by designating certain segments of the Allegheny River in the Commonwealth of Pennsylvania as a component of the National Wild and Scenic Rivers System, and for other purposes.

Conservation

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

16 USC 1274 note.

SECTION 1. DESIGNATION OF ALLEGHENY RIVER,

In order to preserve and protect for present and future generations the outstanding scenic, natural, recreational, scientific, historic, and ecological values of the Allegheny River in the Commonwealth of Pennsylvania, and to assist in the protection, preservation, and enhancement of the fisheries resource associated with such river, section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) is amended by adding the following new paragraph at the end:

"() ALLEGHENY, PENNSYLVANIA.--The segment from Kinzua Dam downstream approximately 7 miles to the United States Route 6 Bridge, and the segment from Buckaloons Recreation Area at Irvine, Pennsylvania, downstream approximately 47 miles to the southern end of Alcorn Island at Oil City, to be administered by the Secretary of Agriculture as a recreational river through a cooperative agreement with the Commonwealth of Pennsylvania and the counties of Warren, Forest, and Venango, as provided under section 10(e) of this Act; and the segment from the sewage

treatment plant at Franklin downstream approximately 31 miles to the refinery at Emlenton, Pennsylvania, to be administered by the Secretary of Agriculture as a recreational river through a cooperative agreement with the Commonwealth of Pennsylvania and Venango County, as provided under section 10(e) of this Act."

16 USC 1274 note.

SEC. 2. ADVISORY COUNCILS FOR THE ALLEGHENY NATIONAL RECREATIONAL RIVER

(a) ESTABLISHMENT.--The Secretary of Agriculture (hereafter in this Act referred to as the "Secretary") shall establish within 120 days after the date of enactment of this Act 2 advisory councils to advise him on the establishment of final boundaries and the management of the river segments designated by section 1 of this Act (hereinafter referred to as the 'Allegheny National Wild and Scenic River'), as follows:

(1) The Northern Advisory Council, to provide advice for the management of the segments of the Allegheny National Wild and Scenic River between Kinzua Dam and Alcorn Island.

(2) The Southern Advisory Council, to provide advice for the management of the segment of the Allegheny National Wild and Scenic River between Franklin and Emlenton.

106 STAT. 109

PUBLIC LAW 102-271--APR. 20, 1992

(b) NORTHERN ADVISORY COUNCIL.--(1) The Northern Advisory Council shall be composed of 9 members appointed by the Secretary as follows:

(A) The Forest Supervisor of the Allegheny National Forest, or his designee, who shall serve as chair of the Council and be a nonvoting member.

(B) The Secretary of the Department of Environmental Resources of the Commonwealth of Pennsylvania, or his designee.

(C) 6 members, 2 from each county from recommendations submitted by the County Commissioners of Warren, Forest, and Venango Counties, of which no fewer than 2 such members shall be riparian property owners along the Allegheny National Wild and Scenic River.

(D) One member from a nonprofit conservation organization concerned with the protection of natural resources from recommendations submitted by the Governor of the Commonwealth of Pennsylvania.

(2) Members appointed under subparagraphs (C) and (D) of paragraph (1) shall be appointed for terms of 3 years. A vacancy in the Council shall be filled in the manner in which the original appointment was made.

(3) Members of the Northern Advisory Council shall serve without pay as such and members who are full-time officers or employees of the United States shall receive no additional pay by reason of their service on the Commission. Each member shall be entitled to reimbursement for expenses reasonably incurred in carrying out their responsibilities under this Act.

Termination date.

(4) The Northern Advisory Council shall cease to exist 10 years after the date on which the Secretary approves the management plan for the Allegheny National Recreation River.

(c) SOUTHERN ADVISORY COUNCIL.--(1) The Southern Advisory Council shall be composed of 7 members appointed by the Secretary as follows:

(A) The Forest Supervisor of the Allegheny National Forest, or his designee, who shall serve as a nonvoting member.

(B) The Secretary of the Department of Environmental Resources of the Commonwealth of Pennsylvania, or his designee, who shall serve as chairman.

(C) 4 members from recommendations submitted by the County Commissioners of Venango County, of which at least one shall be a riparian property owner along the Allegheny National Wild and Scenic River.

(D) One member from a nonprofit conservation organization concerned with the protection of natural resources, from recommendations submitted by the Governor of the Commonwealth of Pennsylvania.

(2) Members appointed under subparagraphs (C) and (D) of paragraph (1) shall be appointed for terms of 3 years. A vacancy of the county representatives on the Council shall

be filled in the manner in which the original appointment was made.

(3) Members of the Southern Advisory Council shall serve without pay as such and members who are full-time officers or employees of the United States shall receive no additional pay by reason of their service on the Commission. Each member shall be entitled to reimbursement for expenses reasonably incurred in carrying out their responsibilities under this Act.

106 STAT. 110

PUBLIC LAW 102-271--APR. 20, 1992

Termination date.

(4) The Southern Advisory Council shall cease to exist 10 years after the date on which the Secretary approves the management plan for the Allegheny National Recreation River.

16 USC 1274

SEC. 3. ADMINISTRATION OF ALLEGHENY NATIONAL WILD AND SCENIC RIVER.
(a) BOUNDARIES.--After consultation with the Commonwealth of Pennsylvania, advisory councils, local governments, and the public, and within 18 months after the enactment of this Act, the Secretary shall take such action with respect to the segments of the Allegheny River designated under section 1 of this Act as is required under section 3(b) of the Wild and Scenic Rivers Act.

(b) INTERIM MEASURES.--As soon as practicable after enactment of this Act, the Secretary, shall issue guidelines specifying standards for local zoning ordinances, pursuant to section 6(c) of the Wild and Scenic Rivers Act, with the objective of protecting the outstandingly remarkable values of the Allegheny Wild and Scenic River, as defined by the Secretary. Once issued, such guidelines shall have the force and effect provided in section 6(c) of the Wild and Scenic River Act.

Public lands. Minerals and mining.

(c) ADMINISTRATION OF CERTAIN SEGMENTS.--(1) Land and mineral rights acquired by the Secretary for the purpose of managing the Allegheny National Wild and Scenic River segments located between Kinzua Dam and Alcorn Island shall be added to and become part of the Allegheny National Forest.

(2) Land and mineral rights acquired by the Secretary for the purpose of managing the Allegheny National Wild and Scenic River segment located between Franklin and Embleton may be managed under a cooperative agreement with the Commonwealth of Pennsylvania.

SEC. 5. STUDY RIVERS.

16 USC 1276

(a) STUDY.--Section 5(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) is amended by adding the following new paragraphs at the end thereof:

"() CLARION, PENNSYLVANIA.--The segment of the main stem of the river from Ridgway to its confluence with the Allegheny River. The Secretary of Agriculture shall conduct the study of such segment."

106 STAT. 111

PUBLIC LAW 102-271--APR. 20, 1992

"() MILL CREEK, JEFFERSON AND CLARION COUNTIES, PENNSYLVANIA.--The segment of the main stem of the creek from its headwaters near Gumbert Hill in Jefferson County, downstream to the confluence with the Clarion River."

16 USC 1274 NOTE.

SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as may be necessary to carry out this Act.

Approved April 20, 1992.

LEGISLATIVE HISTORY--S. 606 (H.R. 1323):

HOUSE REPORTS: No. 102-87 accompanying H.R. 1323 (Comm. on Interior and Insular Affairs).

SENATE REPORTS: No. 102-232 (Comm. on Energy and Natural Resource)

CONGRESSIONAL RECORD:

Vol 137 (1991): June 3, H.R. 1323 considered and passed House.

Nov. 26, s. 606 considered and passed Senate.

Vol. 138 (1992): Feb. 18, 19, considered and passed House, amended

Apr. 8, Senate concurred in House amendment.

APPENDIX E

ALLEGHENY NATIONAL WILD AND SCENIC RIVER
INTERIM MANAGEMENT GUIDELINES
JULY 1993

FEDERAL, STATE AND LOCAL REGULATIONS AFFECTING
LANDS WITHIN
THE ALLEGHENY NATIONAL RECREATIONAL
RIVER CORRIDOR

USDA - FOREST SERVICE
ALLEGHENY NATIONAL FOREST

and

AGENCIES AND ORGANIZATIONS TO CONTACT FOR
INFORMATION AND SUPPORT

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INTERIM MANAGEMENT GUIDELINES FOR THE ALLEGHENY RIVER
A "RECREATIONAL" COMPONENT OF THE
FEDERAL WILD AND SCENIC RIVER SYSTEM

INTRODUCTION

On April 20, 1992, eighty-five miles of the Allegheny River was added to the Federal Wild and Scenic River System under Public Law 102-271 in a "recreational" river classification. The Act specifies that two Advisory Councils would be formed to advise the Secretary on final corridor boundaries and the development of management guidelines to protect the outstandingly remarkable values of the designated segments of the Allegheny River. The Act also specifies that during the development of management guidelines, a set of interim guidelines will be issued to protect the river values until final guidelines are completed.

It is important to note that approximately 80% of the corridor along the designated sections are in private ownership and that designation in the Federal Wild and Scenic River System does not give the federal government any power to zone or otherwise regulate land use on private lands. During the development of the Allegheny National Forest Land and Resource Management Plan, individual management area standards and guidelines were developed for National Forest lands to protect the Allegheny River corridor. Because of the preponderance of private lands in the corridor and their potential for affecting river values, it was determined that the need for interim guidelines could be best met by listing existing federal, state and local laws and regulations which apply to the river corridor. These Interim Management Guidelines, therefore, are simply a Listing of Existing Regulations which apply to the Allegheny River and do not represent any new regulations or regulatory authority.

This listing was developed by agencies responsible for the implementation and/or regulation of applicable laws. The intent is to include those laws which are most directly and commonly applicable to the designated segments of the Allegheny River for use as a reference by municipal officials and the public for their guidance in carrying out and control activities on public and private lands. Although many of these laws apply to public lands as well, State Game Lands, State Forest Land and National Forest Land management activities are also guided by separate management plans which are not included in this summary.

-

These interim Guidelines will also serve as a starting point for the development of final guidelines for the protection of the river values in the designated segments.

SECTION 1 FEDERAL REGULATORY AUTHORITIES

SECTION 404 OF THE CLEAN WATER ACT

Authority

Section 404 of the Clean Water Act, enacted by Congress in 1972, (33 U.S.C. 1344)

Provisions

This gives the Corps of Engineers jurisdiction over "all waters of the United States", this includes the Allegheny River, its tributaries, adjacent and isolated wetland areas.

Regulated activities include all activities which involve a discharge of dredge or fill material into "all waters of the United States". An individual Department of the Army Permit must be obtained prior to the discharge of fill.

Some examples of activities which require authorization when they occur within the waters of the United States include:

- Roadway construction.
- Placement of rock and fill for bank protection.
- Site development fills for recreational, industrial, commercial, and residential properties.
- Fills for ponds, dikes, and water intakes.
- Mechanized land clearing, such as grading.

Projects which involve wetland areas need to have the wetland boundaries accurately delineated, and every effort should be made to avoid impacts to wetland areas, minimize project impacts, and lastly mitigate for the impacts.

In Pennsylvania a Joint Permit application can be filed with the Pennsylvania Department of Environmental Resources to apply for an individual Department of the Army Permit. This application also applies for Section 401 Water Quality Certification, which must be obtained from the state, and is a Federal requirement.

Effects on Designated Segments

Permits are granted only when projects are found not to be contrary to the public interest. Many environmental, social, and economic factors are considered in conducting the public interest review, and the Wild and Scenic status is also considered.

Nationwide and General permits are not valid within areas designated as Wild and Scenic, and therefore individual permits are required, and each permit receives its own public interest review.

Contact

Scott Hans at 814-763-5574.

RIVERS AND HARBORS ACT

Authority

Section 10 of the 1899 Rivers and Harbors Act (33 U.S.C. 403)

Provisions

This act gives the U.S. Army Corps of Engineers jurisdiction over "all navigable waters of the United States". The Allegheny River is considered navigable from its mouth (mile 0.0) to Olean, New York (mile 257.6).

The construction of any structure in or over any navigable water of the United States, the excavating from or depositing of materials in such waters, or the accomplishment of any other work affecting the course, location, conditions, or capacity of such waters is unlawful unless authorized by a Department of the Army Permit.

Section 10 jurisdiction extends to the ordinary high water mark on both banks of the river.

Bridges and causeways are excluded from Section 10 regulation, however, they are regulated under Section 9 of the Rivers and Harbors Act by the U.S. Coast Guard. Bridges and causeways may also require authorization under Section 404 of the Clean Water Act from the Corps of Engineers.

Effects on Designated Segments

The entire length of this designated area is subject to Section 10 regulation, but only within the boundaries of the ordinary high water mark.

Permits are granted only when projects are found not be to contrary to the public interest. Many environmental, social, and economic factors are considered in conducting the public interest review, and the Wild and Scenic status is also considered.

Nationwide and General permits are not valid within areas designated as Wild and Scenic, and therefore individual permits are required, and each permit receives its own public interest review.

Contact

Scott Hans at 814-763-5574.-

FEDERAL ENDANGERED SPECIES ACT

Authority

Act of December 28, 1973, P.L. 93-205, 87 Stat. 884 as amended, 16 U.S.C. 50 CFR Part 17, as amended February 22, 1974.

Provisions

Gives federal protection to the Northern riffleshell mussel (Epioblesma torulosa rangiana) and Clubshell mussel (Pleurobema Clara.).

Effects on Designated Segments

Requires Federal agencies, through consultation with the Fish and Wildlife Service, to ensure that activities they authorize, fund or carry out are not likely to jeopardize the continued existence of the species.

Section c) of the Act and Implementing regulations at 50 CFR 17.21 prohibits taking any listed wildlife species. This section also places prohibitions on possessing, selling, delivery, carrying, transporting, or shipping any such wildlife that has been taken illegally.

Contact

Carol Copeyon at 814-234-4090.

FEDERAL WILDERNESS ACT

Authority

Act of September 3, 1964, P.L. 88-577, 78 Stat. 890; 16, U.S.C. 1121.

Provisions

Protects certain public lands which have been designated as a component of the "National Wilderness Preservation System."

Charges administering agency with preserving the wilderness character of the area.

Prohibits the use of motor vehicles, motorized equipment and prohibits the installation of structures within any wilderness area.

Effects on Designated Segments

Seven Wilderness Islands occur within the designated section of the Allegheny River between Buckaloons and Tionesta. The public is allowed to hunt and camp on these islands, however, no permanent manmade improvements can be installed to accommodate this use.

Contact

Gary Kell at 814-723-5150.

SECTION 2 STATE REGULATORY AUTHORITIES

AIR POLLUTION CONTROL

Authority

Air Pollution Control Act, Act of January 8, 1960 (1959 P.L. 2119, No. 787), 25 Pa. Code Article HI Air Resources.

Provisions

Provides for the better protection of the health, general welfare and property of the people of the Commonwealth by the control, abatement, reduction, and prevention of the pollution of the air.

- All significant air pollution sources are required to maintain or improve the air quality.
- Examples of such industrial/commercial activities subject to permitting are utility stations and oil refineries as well as much smaller boilers and industrial processes that are significant sources of air pollution.

Effects on Designated Segments of the Allegheny River

The current air quality regulations provide for the control and prevention of air pollution along the Allegheny National Wild and Scenic River corridor and adjacent lands.

Resource/Data Availability

The current permit database (which will be expanded under Title V of CAAA) will include all significant sources of air pollution along the river corridor. The emissions inventory contains information on the permitted sources and mobile sources, etc.

Pennsylvania Emission Data System (PEDS) for commission inventory data.

Sources of air dispersed pollutants in river valley.

Permitted plants along the Allegheny River.

- 1) Coal fired power plants: Scrubgrass Power Company and Pennsylvania Electric Company
- 2) Petroleum refineries: United Refinery in Warren, Pennsylvania.

Contact

Larry Wonders at 814-332-6940 to obtain emissions inventory data from PEDS.

Douglas L. Leshner at 717-787-4325 for additional information regarding the Air Pollution Act.

CLEAN STREAMS LAW CLEAN WATER ACT

Authority

Clean Streams Law, Clean Water Act, Act of June 22, 1937, P.L. 1987, as amended, (35 P.S. Sections 691.1 et seq.). 25 Pa. Code, Chapter 25, National Pollutant Discharge Elimination System; Chapter 93, Water Quality Standards; Chapter 102, Erosion Control.

Provisions

Functions:

- A. Provides regulations to control discharges of sewage or industrial waste into streams and lakes. Exclusively enforced by DER, Bureau of Water Quality. Use regulated through a permit system:
 - Two types of NPDES permits
 - (1) Industrial
 - (2) Construction activities
- B. Basis for State's Chapter 102, Erosion Control Rules and Regulations and the Federal NPDES permits for storm water discharges from construction activities.
 - Control pollutants from storm water discharges associated with construction activities.

An NPDES storm water permit for construction activities allow the discharge of storm water from construction sites. The permit is required for certain types of construction activities >5 acres and requires meeting Chapter 102 requirements for erosion control.
 - All earthmoving activities involving timber harvesting must have an erosion and sedimentation (E&S) control plan. The E&S Plan addresses ways of controlling runoff sediment and emphasizes avoidance of steep slopes and sensitive soils, maintenance of vegetative cover, and application of control measures.
 - Where earth disturbance permits are not required because another DER permit is in effect, Erosion and Sedimentation Control Plan Reviews are required where affected lands are within 50 feet of a flowing stream.
 - Municipalities are required to notify DER immediately after receiving an application for a building permit involving earthmoving activities affecting 5 acres or more of land. Generally, this includes residential, commercial, utility and highway construction. A general NPDES permit is available for certain types of construction (102.42).
 - Municipalities may not issue a building permit to those engaged in earthmoving requiring a Department permit until the permit is issued (102.43).

C. Subject to valid existing rights as they are defined under 522 of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et seq.), no mining operations except those which exist on August 3~ 1977~ shall be permitted:

1. on any lands within the boundaries of units of the National Wilderness Preservation and Wild and Scenic Rivers System, including study rivers designated under Section 5(a) of the Wild and Scenic Rivers Act and National Recreation Areas designated by Act of Congress.

Effects on Designated Segments of Allegheny River

The regulation of discharges of sewage and industrial waste and regulation of earthmoving activities at construction sites along the Allegheny River.

With or without designation, DER regulations require that the water quality of the river be maintained at or above state/federal water quality standards.

Existing regulations ensure that future activities will not induce unwanted sedimentation into the river and erosion of streambanks. Together with the Pennsylvania Storm Water Management Act and Dam Safety and Encroachments Act~ the Clean Streams Law closely scrutinizes activities on islands and on lands within 100 feet of the river shoreline.

Resource Data/Availability

- Erosion and Sedimentation Pollution Control Program Manual
- Controlling Erosion and Sediment Pollution from Timber Harvesting Operations
- Erosion and Sedimentation Control Plan Development Checklist and Worksheets
- NPDES guidance documents for permitting construction activities
- Location, Volume and Quantity of NPDES discharges available in file in Northwest Regional Office
- Water Quality Network Information in Stored System

Contact

Bill McCarthy 814-332-6942

Kenneth Murin 717-783-7577

Michael Sherman 717-783-7577

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT/HAZARDOUS CLEANUP ACT

Authority

Hazardous Sites Cleanup Act of Oct. 18, 1988 - State statute, P.L. 756 No. 108.35, P.S. 607.0.101-607.0.1305.
Comprehensive Environmental Response, Compensation and Liability Act of 1980 - Federal statute, P.L.
96-510 as amended.

Provisions

Identification, assessment, investigation and response to sites where hazardous substances are threatening
or have the potential to threaten human health and the environment.

Neither statute includes permitting provisions. Both statutes are intended to restore previously
contaminated properties.

Effects on Designated Segments of the Allegheny River

Release of hazardous substances from these sites do have the potential to affect water quality in the
Allegheny. Cleanup of these sites under the state and federal Superfund programs should eliminate the
real or potential threats to the river.

Resource/Data Availability

Significant information is available on the following sites:

Sites on NPL

ALLEGHENY BASIN

Site Name	Municipality	County
Bruin Lagoon	Bruin Borough	Butler
Craig Farm Drum	Perry Township	Armstrong
Hranica Site	Buffalo Township	Butler
Lindane Dump	Harrison Township	Allegheny
Ohio River Park	Neville Township	Allegheny
Saegertown Industrial Area	Saegertown Borough	Crawford

Sites deemed for response under HSCP

Site Name	Municipality	County
Avtex Fibers, Inc.	Vernon Township	Crawford
Couriersport PCE	Coudersport Borough	Potter
Delta Chemical, Inc	E. Franklin Township	Armstrong
Old American Glycerine*	N. Buffalo Township	McKean
Phoenix Materials*	Washington Township	Armstrong
Presque Isle Chemical	Lewis Run	Erie
Schiller Site	Richmond Township	Crawford
Semiconductors	Kane Borough	McKean
Specialities Shaler/JTC	Bruin Borough	Butler

*Response actions completed

Contact

Karen Bassett at 717-783-7816.

DAM SAFETY AND ENCROACHMENTS ACT

Authority

Dam Safety and Encroachments Act, the Act of November 26, 1978, P.L. 1375, No. 325 as amended, 25 Pa. Code, Chapter 105.

Purposes

The purposes of this chapter are to:

- (1) Provide for the comprehensive regulation and supervision of dams, reservoirs, 'water obstructions and encroachments in the Commonwealth in order to protect the health, safety, welfare and property of the people.
- (2) Assure proper planning, design, construction, maintenance, monitoring and supervision of dams and reservoirs, including preventive measures necessary to provide an adequate margin of safety.
- (3) Assure proper planning, design, construction, maintenance and monitoring of water obstructions and encroachments, in order to prevent unreasonable interference with water flow and to protect navigation.
- (4) Protect the natural resources, environmental rights and values secured by Pa. Const. art. I, § 27 and conserve and protect the water quality, natural regime and carrying capacity of watercourses.

Scope

- (a) The following structures or activities are regulated under the act and section 302 of the Flood Plain Management Act (32 P.S. § 679.302):
 - (1) Dams on a natural or artificial watercourse, other than those licensed under the Federal Power Act (16 U.S.C.A. §§ 791a--825s), where one or more of the following occur:
 - (i) The contributory drainage area exceeds 100 acres.
 - (ii) The greatest depth of water measured by upstream toe of the dam at maximum storage elevation exceeds 15 feet.
 - (iii) The impounding capacity at maximum storage elevation exceeds 50 acre-feet.
 - (2) Dams used for the storage of water not located on a watercourse and which have no contributory drainage where the greatest depth of water measured at upstream toe of the dam at maximum storage elevation exceeds 15 feet and the impounding capacity at maximum storage elevation exceeds 50 acre-feet.
 - (3) Dams used for the storage of fluids or semifluids other than water, the escape of which may result in air, water or land pollution or in danger to persons or property.

- (4) Water obstructions and encroachments other than dams located in, along or across, or projecting into a watercourse, floodway or body of water, whether temporary or permanent.
- (5) Flood control projects constructed, owned or maintained by a governmental unit.

Permit Requirements

- (a) A person may not construct, operate, maintain, modify, enlarge or abandon a dam, water obstruction or encroachment without first obtaining a written permit from the Department.

(Definitions)

Encroachment—A structure or activity which 'changes, expands or diminishes the course, current or cross section of a watercourse, floodway or body of water.

Water obstruction—

- (i) A dike, bridge, culvert, wall, wingwall, fill, pier, wharf, embankment, abutment or other structure located in, along or across or projecting into a watercourse, floodway or body of water.
- (ii) In the case of ponds, lakes and reservoirs, a water obstruction is considered to be in or along the body of water if, at normal pool elevation, the water obstruction is either in the water or adjacent to and abutting the water's edge.

Permit Applications

- (a) Application for permits under this chapter shall be submitted to the Department, in writing, upon forms provided by the Department. Applicants are encouraged to request a meeting with the Department prior to submission of their applications.
- (b) Applications for Department permits are also considered an application for a permit from the U.S. Army Corps of Engineers.

Application Review Criteria (Partial)

- (9) Consistency with State and local floodplain and stormwater management programs, the State Water Plan and the Coastal Zone Management Plan.
- (10) Consistency with the designations of wild, scenic and recreational streams under the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. §§ 1271--1287) or the Pennsylvania Scenic Rivers Act (32- P.S. §§ 820.21--820.29), including identified 1-A candidates.
- (11) Consistency with State antidegradation requirements contained in Chapters 92, 95 and 102 (relating to water quality standards; waste water treatment requirements; and erosion control) and the Clean Water Act (33 U.S.C.A. §§ 1251--1376).
- (12) Secondary impacts associated with but not the direct result of the construction or substantial modification of the dam or reservoir, water obstruction or encroachment in the area of the project and in areas adjacent thereto and future impacts associated with dams, water

obstructions or encroachments, the construction of which would result in the need for additional dams, water obstructions or encroachments to fulfill the project purpose.

- (13) For dams, water obstructions or encroachments in, along, across or projecting into a wetland, as defined in § 105.1 (relating to definitions), the Department will also consider the impact on the wetlands values and functions in making a determination of adverse impact.

Contact for Permit Applications

Northcentral Regional Office
200 Pine Street
Williamsport, PA 17701

Bradford, Cameron, Centre, Clearfield, Clinton, Columbia,
Lycoming, Montour, Northumberland, Potter, Snyder,
Sullivan, Tioga and Union

Northeast Regional Office
Centre, Suite 203
667 North River Street
Plains, PA 18705-1099

Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Cross Valley
Northampton, Pike, Schuylkill, Susquehanna, Wayne and
Wyoming

Northwest Regional Office
190 Adams Road
Jamestown, PA 16134

Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson,
Lawrence, McKean, Mercer, Venango and Warren

Southcentral Regional Office
One Ararat Blvd., Room 147
Harrisburg, PA 17110

Adams, Bedford, Berks, Blair, Cumberland, Dauphin,
Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon,
Mifflin, Perry and York

Southeast Regional Office
Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428

Bucks, Chester, Delaware, Montgomery and Philadelphia

Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene,
Indiana, Somerset, Washington and Westmoreland

ENDANGERED AND THREATENED SPECIES
FISH, AMPHIBIANS, REPTILES AND AQUATIC ORGANISMS

Authority

Title 30 Chapter 75, Fish and Boat Code, revised February 9, 1991, Pennsylvania Fish Commission.

Provisions

Protect Fish, Amphibians, Reptiles and Aquatic Organisms of special concern.

Classification categories contained within state regulations or used by state agencies.

- PE = PENNSYLVANIA ENDANGERED - All species declared by: 1) the Secretary of the United States Department of the Interior to be threatened with extinction and appear on the Endangered Species List or the Native Endangered Species List published in the Federal Register; or 2) have been declared by the Pennsylvania Fish Commission, Executive Director to be threatened with extinction and appear on the Pennsylvania Endangered Species List published in the Pennsylvania Bulletin.
- PT = PENNSYLVANIA THREATENED - All species declared by: 1) the Secretary of the United States Department of the Interior to be in such small numbers throughout their range that they may become endangered if their environment worsens, and appear on a Threatened Species List published in the Federal Register; or 2) have been declared by the Pennsylvania Fish Commission Executive Director to be in such small numbers throughout their range that they may become endangered if their environment worsens and appear on the Pennsylvania Threatened Species List published in the Pennsylvania Bulletin.
- PC = PENNSYLVANIA CANDIDATE - Animals that could become endangered or threatened in the future. All of these are uncommon~ have restricted distribution or are at risk because of certain aspects of their biology.
- N = NONE - No current legal status exists, but is under review for future listing.

Effects on Designated Segments of the Allegheny River

Further protection of endangered and threatened species and their critical habitats.

Resource Data/Availability

All known occurrences are housed in the Pennsylvania Natural Diversity Inventory information system.

Contact

Endangered Species and Herpetology
Coordinator
Pennsylvania Fish and Boat Commission
Bureau of Fisheries and Engineering
450 Robinson Lane Bellefonte, PA 16823
814-359-5113

ENDANGERED AND THREATENED SPECIES INVERTEBRATES

Authority

No current legal status, but is under review for future listing.

Provisions

No State agency has been assigned to develop regulations to protect terrestrial invertebrates~ although a federal status may exist for some species.

Aquatic invertebrates are regulated by the Pennsylvania Fish Commission~ but have not been listed to date.

Resource Data/Availability

In the process of being studied by the Pennsylvania Natural Diversity Index (PNDI).

Contact

Pennsylvania Natural Diversity Inventory
Dan Devlin
717-787-3444

ENDANGERED AND THREATENED SPECIES PLANT SPECIES

Authority

Conservation of Pennsylvania Native Wild Plants, Title 25 Chapter 82, January 1, 1988, DER.

Provisions

Protect native wild plant species of special concern.

Classification categories contained within state regulations or used by state agencies.

- PE = PENNSYLVANIA ENDANGERED - A classification of plant species which are in danger of extinction throughout most of their natural range within this Commonwealth, if critical habitat is not maintained or if the species is greatly exploited by man. This classification shall also include any populations of plant species that have been classified as Pennsylvania Extirpated, but which subsequently are found to exist in this Commonwealth.
- PT = PENNSYLVANIA THREATENED - A classification of plant species which may become endangered throughout most or all of their natural range within this Commonwealth, if critical habitat is not maintained to prevent their future decline, or if the species is greatly exploited by man.
- PR = PENNSYLVANIA RARE - A classification of plant species which are uncommon within this Commonwealth as they may be found in restricted geographic areas or in low numbers throughout this Commonwealth.
- PX = PENNSYLVANIA EXTIRPATED - A classification of plant species believed by the Department to be extinct within this Commonwealth. These plants may or may not be in existence outside the Commonwealth.
- PV = PENNSYLVANIA VULNERABLE - A classification of plant species which are in danger of population decline within this Commonwealth because of their beauty, economic value, use as a cultivar, or other factors which indicate that persons may seek to remove these species from their native habitats.
- TU = TENTATIVELY UNDETERMINED - A classification of plant species which are believed to be in danger of population decline, but which cannot presently be included within another classification due to taxonomic uncertainties, limited evidence within historical records, or insufficient data.
- N = NONE - No current legal status exists, but is under review for future listing.

Effects on Designated Segments of the Allegheny River

Further protection of endangered and threatened species and their critical habitats. Resource

Data/Availability

All known occurrences are housed in the Pennsylvania Natural Diversity Inventory information system.

Contact

Plant Program Manager
Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry
Forest Advisory Services
P.O. Box 8552
Harrisburg, PA 17105-8552
717-787-3444

ENDANGERED AND THREATENED SPECIES WILD BIRDS AND MAMMALS

Authority

Pennsylvania Game Commission - Title 34, Game and Wildlife Code.

Provisions

- Protect wild birds and mammals species of special concern
 - Classification categories contained within State regulators or used by State agencies
- PE = PENNSYLVANIA ENDANGERED - Species in imminent danger of extinction or extirpation throughout their range in Pennsylvania if the deleterious factors affecting them continue to operate. These are: 1) species whose numbers have already been reduced to a critically low level or whose habitat has been so drastically reduced or degraded that immediate action is required to prevent their extirpation from the Commonwealth; or 2) species whose extreme rarity or peripherality places them in potential danger of precipitous declines or sudden extirpation throughout their range in Pennsylvania; or 3) species that have been classified as "Pennsylvania Extirpated", but which are subsequently found to exist in Pennsylvania as long as the above conditions 1 or 2 are met; or 4) species determined to be "Endangered" pursuant to the Endangered Species Act of 1973, Public Law 93-205 (87 Stat. 884), as amended.
- PT = PENNSYLVANIA THREATENED- Species that may become endangered within the foreseeable future throughout their range in Pennsylvania unless the causal factors affecting the organism are abated. These are: 1) species whose populations within the Commonwealth are decreasing or have been heavily depleted by adverse factors and while not actually endangered~ are still in critical condition; 2) species whose populations may be relatively abundant in the Commonwealth but are under severe threat from serious adverse factors that have been identified and documented; or 3) species whose populations are rare or peripheral and in possible danger of severe decline throughout their range in Pennsylvania; or 4) species determined to be "Threatened" pursuant to the Endangered Species Act of 1973, Public Law 93-205 (87 Stat. 884), as amended, that are not listed as "Pennsylvania Endangered".
- N = NONE - No current legal status, but is under review for future listing.

Effects on Designated Segments of Allegheny River

Further protection of endangered and threatened species and their critical habitats.

Resource Data/Availability

Pennsylvania Game Commission's Fish and Wildlife Database..

Contact

Pennsylvania Game Commission
Bureau of Wildlife Management
2001 Elmerton Avenue
Harrisburg, PA 17110-9797
717-787-5529

FEDERAL HIGHWAY ADMINISTRATION

Authority

FHWA Regulation on 4(f) and 6(g), 49 U.S.C. 303 and 23 U.S.C. 138.

The Federal Highway Administration should be contacted for additional guidance related to their 4(f) and 6(f) regulations.

Provisions

Protects certain public lands and all historic sites.

FHWA may not approve the use of land from a significant publicly owned public park, recreation area, or wildlife and waterfowl refuge, or any significant historic site unless a determination is made that:

- * there is no feasible and prudent alternative to the use of land from the property; and
- * the action includes all possible planning to minimize harm to the property.

PennDOT is responsible for issuing access (i.e., driveway) permits to state routes.

Effects on Designated Segments of the Allegheny River

Transportation impacts where river crossings exist or where highways parallel the river.

Preserve the Department's ability to maintain highway system in the geographic vicinity of any proposed wild and scenic river corridor.

Resource/Data Availability

Data resource for river crossings, state route systems, twelve year program projects.

Twelve Year Program Projects:

- * Kennerdell Bridge Rehab (SR 3008, Venango County)
- * Petroleum Street Bridge Rehab (SR 0062, Venango County)
- * Depot Street Tidioute Bridge Rehab (SR 0127 Warren County)
- * Hickory Street Warren Bridge Rehab (SR 3005 Warren County)
- * Hunter Street Station Bridge Rehab (SR 0062 Forest County)
- * West Hickory Bridge Rehab (SR 0127 Warren County)

Contact

Dean J. Collins, District 1-0 Program Engineer, at 814-659-4383.

FISH AND BOAT CODE

Regulatory Authority

Commonwealth of Pennsylvania, Fish and Boat Code, Act 1980-175, Title 30, Pa. Consolidated Statutes.

Commonwealth of Pennsylvania, Fishing and Boating Regulations 1993, Pennsylvania Fish and Boat Commission.

Purpose

To provide direction and guidance to the Commission in executing its mission of providing fishing and boating opportunities through the protection and management of aquatic resources.

Provisions

As apply to all Commonwealth waterways, "No person shall alter or disturb any stream, stream bed, fish habitat, water or watershed in any manner which might cause damage to or loss of such without permit." The Fish and Boat Code further states that no person, regardless of intent shall alter any substances deleterious (to fish life) to run, flow, wash or be emptied into the waters of the Commonwealth of Pennsylvania. The Fish and Boat Code gives the Fish Commission authority to enforce the provisions of the Pennsylvania Clean Streams law, Chapter 102 Regulations, and the Pennsylvania Dam Safety and Encroachments Act (Chapter 105 Regulations) on state waterways.

Anticipated Effect on the Allegheny River and adjacent lands

Specific Activities which Require Permitting

- A. By permit - Fishing and boating
- B. By permit - Scientific, education research or other collecting activities
- C. By permit - Use of explosives in waters for engineering purposes
- D. By permit - Reptile and amphibian hunt permits

Resource Data/Availability/

- A. Allegheny River Survey Report 1970-75. It addresses fisheries, invertebrate, islands, vegetation, access areas, etc.
- B. Routine sampling over the past seven (7) years documenting smallmouth bass populations at six (6) specific locations.

Contact

Lawrence Hoffman at 717-657-4515.

FLOODPLAIN MANAGEMENT ACT

Authority

Floodplain Management Act (Act 166)

October 4, 1978, P.L. 851, No. 166 (32 P.S. Sections 679.101 et seq), regulations, 16 Pa. Code 38.1 et seq.

Provisions

-
Encourage the proper management of floodplain areas.

-
Requires every local municipality recognized as having an area or area subject to flooding, to participate in the National Flood Insurance Program (NFIP).

-
Requires municipalities to enact floodplain management regulations which, at least, comply with the minimum requirements of that program and with the regulations adopted by the Pennsylvania Department of Community Affairs (DCA).

-
If uses within the floodplain are permitted, a special permit must be obtained prior to construction.

-
Act only affects development within the one hundred year floodplain.

Effects on Designated Segments of the Allegheny River

(Source 1974-75 U.S. Army Corps of Engineers Flood Plain Information Maps for each county)

Segment Kinzua Dam to Warren - Excepting Verbec and Warewell islands, the other islands are generally above 100-year flood elevation.

Segment Buckaloons to Warren County Line - All the islands and most of the first 100 feet of undeveloped shoreline is within 100-year flood elevation.

Warren County Line to Oil City - Less than 50% of the islands and the first 100 feet of the shoreline lies within the 100-year flood elevation.

Franklin to Emlenton - Less than 20% of islands lie within the 100-year flood elevation.

Contact:

Bruce Hearn 717-787-7403
Department of Community Affairs

Department of Community Affairs 814-871-4241
Northwest Regional Office
Third Floor Rothrock Building
121 West 10th Street
Erie, Pennsylvania 16501

HIGH QUALITY AND EXCEPTIONAL VALUE WATERS

Authority

Clean Streams Law - P.L. 1987, 25 Pa. Code Chapters 93 and 95, §§93.3, 93.9, 95.1.

Provisions

- A. High Quality waters shall be maintained and protected at their existing quality or enhanced~ unless proposed new, additional or increased discharge(s) of pollutants is (are) justified as a result of necessary economic or social development which is of significant public value and the proposed discharge(s), alone or in combination with other anticipated discharges, will not violate applicable water quality standards.

Exceptional Value waters shall be maintained and protected, at a minimum, at their existing quality.

Provides special water quality protection to waterbodies that persons: 1) water quality better than applicable standards (or are in a natural state); and Z) additional environmental or other features requiring special protection.

- B. Any activity that can satisfy the requirement to maintain existing water quality can be permitted in special protection waters. In High Quality Waters, some activities that would degrade water quality could be permitted providing social or economic justification. Activities most compatible with special protection designation are listed below.

- Forest Management
- Fish and Wildlife Management
- Single Family Dwellings
- Cabins/Seasonal Residences
- Nurseries/Greenhouses
- Home Occupation
- Places of Worship
- Bed and Breakfast Places

Effects on Designated Segments of the Allegheny River

Point source discharges will be discouraged in favor of non-discharge alternatives where they are economically feasible, environmentally sound and consistent with other DER requirements to protect surface and ground waters.

Effluent limits for point source discharges will be calculated to maintain existing, instream, long-term average water quality for selected parameters of concern.

Social or economic justification will not be evaluated in High Quality watersheds until all non-discharge alternatives have been considered and found to be unacceptable from either a technical or economic standpoint.

Best Management Practices, as defined in the Department's Special Protection Waters Implementation Handbook will be required for all non-point source activities.

Resource Data/Availability

Listing of waterbodies included in the special protection programs available at 25 Pa. Code Chapter 93.9.

Water quality information describing waterbodies included in the special protection programs is available in the EPA STORET database or Pa. DER files and can be obtained by contacting:

STORET Coordinator
PA-DER BWAM
P.O. Box 8465
Harrisburg, PA 17105-8465

HISTORIC PRESERVATION ACT

Authority

Act of 37 Pa. C.S. Sec. 500 et. seq,

Provisions

- A. The conservation of Pennsylvania's historic and natural heritage and the preservation of public records, historic documents and objectives of historic interest, and the identification, restoration and preservation of architecturally and historically significant sites and structures are duties vested primarily in the Pennsylvania Historical and Museum Commission.
- B. The irreplaceable historical, architectural, archaeological and cultural heritage of this Commonwealth should be preserved and protected for the benefit of all of the people, including future generations.

The Act provides that all Commonwealth agencies and political subdivisions shall cooperate fully with the commission in the preservation, protection and investigation of archaeological sites.

The Act authorizes the Pennsylvania Historical and Museum Commission to establish an historic preservation program to identify, evaluate and protect the Commonwealth's historic and cultural resources.

The Act particularly requires greater cooperation among Commonwealth officials or Commonwealth assisted efforts that involve historic or archaeological sites, and requires all Commonwealth agencies to cooperate.

Effects on Designated Segments of Allegheny River

Preservation of the historic and cultural values of Allegheny is another prime objective.

The History Code strengthens the Commonwealth's ability to help by providing technical assistance and greater coordination among Commonwealth agencies, particularly where state land is involved.

Resource Data/Availability

- * Pennsylvania Archaeological Site Survey
- * Pennsylvania Historic Resource Inventory

Contact:

Brenda Barrett, Director, Bureau for Historic Preservation

OIL AND GAS DEVELOPMENT

Authority

The Oil and Gas Act; the Oil and Gas Conservation Law; the Clean Streams Law; Solid Waste Management Act, the Dam Safety and Encroachment Act; the Coal and Gas Resources Coordination Act; the Administrative Code; and 25 Pa. Code Chapters 78, 79, 91, 92, 93, 95, 97, 101, 102 and 105.

Purpose

The Oil and Gas Act is the basic law governing oil and gas wells. In addition, the Oil and Gas Conservation Law applies to conservation wells. The Clean Streams Law provides the Department of Environmental resources with the basic legal authority to prevent and abate water pollution in Pennsylvania, and establishes permit requirements for the discharge of industrial wastes. The Solid Waste Management Act and Oil and Gas Act both establish the framework for the on-site disposal of residual waste. The Dam Safety and Encroachments Act contains the permit requirements for encroachments and water obstructions.

Provisions

The Oil and Gas Act sets forth permitting, drilling, casing, operating, plugging, financial responsibility and site restoration requirements. Before drilling or altering an oil or gas well, a well permit must be obtained from the Department. The well site may not be within 100 feet of a stream, spring or body of water as identified on the 7½ minute topographic map or within 100 feet of any wetland greater than one acre in size unless the Department grants a waiver for a lesser distance. The Act also requires consideration of the impact of the well on public resources such as:

- 1) Publicly owned parks, forests, gamelands and wildlife areas;
- 2) National or State scenic rivers;
- 3) National natural landmarks;
- 4) Habitats of rare and endangered flora and fauna and other critical communities;
- 5) Historical and archaeological sites listed on the Federal or State list of historic places.

Wells must be plugged in accordance with 25 Pa. Code Chapter 78 upon abandonment of the well. Site restoration must occur within nine months of completion of drilling a well or plugging a well.

A NPDES permit must be obtained from the Department prior to discharging any brine or drilling or completion fluids to surface waters. The NPDES permit authorizes the discharges and establishes discharge limitations and monitoring requirements. In addition, a Part 2 - Clean Streams Law Construction Permit is needed to authorize the construction and operation of a treatment facility, or to authorize a discharge to ground water.

References

"Oil and Gas Operators Manual"

Contact

Central Office: Ron Gilius, Division Chief, Surface Activities, 717-772-2199.

Regional Office at Meadville: Ken Young, Regional Program Manager, 814-332-6945.

RIVER ISLANDS

Authority

River Islands Task Force, Governor's Executive Order #1990-7, 4 Pa. Code Chapter 5.

Provisions

Establish an interagency River Island Task Force~ designate DER as lead agency, administer unappropriated or unpatented islands, protect unpatented islands, prevent unauthorized use.

Most recreational activities in accordance with state forest rules and regulations are permitted.

Effects on Designated Segments of the Allegheny River

Further protection of unpatented river islands.

Resource Data/Availability

N/A.

Contact

Dan Devlin at 717-787-3444.

PENNSYLVANIA SEWAGE FACILITIES ACT

Authority

Pennsylvania Sewage Facilities Act of January 1966 P.L. (1965) 1531, as amended (35 P.S. Sections 750.1 et seq.), Regulations 25 Pa. Cede, 71.1 et seq.

Provisions

Requires individual to obtain a sewage permit for on-lot sewage disposal systems. Generally administered by either township or county. Sewage permits are normally required prior to obtaining building permit.

Sewage permit is required of all residences with or without water (without water is recent change in law). Criteria reviewed:

- Is proposal in flood plain soils? If yes, then no permit is issued.
- Must pass percolation test. If soils are too slowly permeable, no go; marginal soils will require larger field.
- Maximum slope for field is 25%. Usually not a factor unless we are talking about soils with poor drainage.

Chapter 73 - Technical aspects of system construction

%Slope			Sewage System Requirements
0	-	8	Regular sewage seepage bed
9	-	15	Trench-type system approved by local sewage officer
16	-	20	Detailed engineering designed Trench-type system
21	-	25	Professional engineer (certified) designed system

Effects on Designated Segments of Allegheny River

Most of the islands between Kinzua Dam and Tionesta are composed of wet, alluvial soils which are not suitable for septic fields.

Where restrictions on septic field development occur, added costs will deter development. This is an important factor on upper segments of the river.

Contact

Smart Gansell at 717-787-3481.

SOLID WASTE MANAGEMENT

Authority

The Solid Waste Management Act- Act 97 of 1980 and the residual and municipal waste regulations promulgated thereunder.

Provisions

To regulate the ongoing generation, transportation, treatment, storage and disposal of residual, municipal and hazardous waste.

Regulation is carried out through the issuing of permits. Effects on Designated Segments of the

Allegheny River

Implementation of the statute and regulations should provide for protection of water quality in the Allegheny.

Resource/Data Availability

Significant information is available on the sites listed in the attachment.

Grunderville Landfill in Warren County:

- Landfill is currently in closure. It is no longer accepting waste; however, there will be continued permitted discharges to air and water.
- NPDES permit to discharge treated landfill leachate.
- Passive methane gas venting system.

Contact

Bill Pounds at 717-787-7382.

Resource/Data Availability specific to Northwest Pennsylvania and the Allegheny

NORTHWEST REGION MEADVILLE

- | | | | |
|----|---|--|---|
| 1. | Vogel
Ed. Vogel, Sr.
Ed. Vogel, Sr. | P.O. Box 847
Mars, PA 16046
(412) 625-1511 | 100403
Jackson Township
Butler County |
| 2. | Northwest Waste
Management
James David | P.O. Box 1798
Butler, PA 16003 | 100585
Clay Township
Butler County |
| 3. | County
Envirite
Tom Badodd | P.O. Box 552
East Hickory, PA 16321
(800) 422-6054 | 101187
Farmington Township
Clarion County |
| 4. | Greentree
Browning-Ferris
Tom Latimer | P.O. Box O
Brockway, PA 15824
(814) 265-1975 | 101397
Fox Township
Elk County |
| 5. | Lake View Waste
Management
Timothy Haaf | 851 Robison Road
Erie, PA 16509
(814) 825-8588 | 100329
Summit Township
Erie County |
| 6. | Kness
McKean County SWA
Richard Sloan | P.O. Box 448
Mount Jewett, PA 16740
(814) 778-5025 | 100361
Sergeant Township
Mc K ean County |

STORM WATER MANAGEMENT

Authority

Pennsylvania Storm Water Management Act of October 1978 (No. 167, P.L. 864) 32 P.S. §680 et seq.

Purpose

Planning and Management of Storm Water to address increased rates and volumes of runoff due to land development including Forest Management activities.

Provisions

- A. Requires each county to develop management plans to deal with stormwater runoff within each watershed with flood potential.
- B. Requires any person engaged in the alteration or development of land which may affect storm water runoff.
 - To assure that the maximum rate of stormwater runoff is no greater after development than before.
 - To manage the quantity, velocity and direction of resulting stormwater runoff in a manner which otherwise protects health and property from possibly injury.
- C. Requirements of county plans are implemented via existing Floodplain and Erosion and Sedimentation Control Regulations as well as DER (Section 105) Dam Safety and Waterway Management Regulations.

Effects on Designated Segments of Allegheny River

Land development activities will be affected by the Stormwater Management Plan once a plan is adopted.

No stormwater management plan for the Warren, Forest and Venango Counties.

Resource Data/Availability

- Storm Water Management Plan for the Allegheny River - available from those counties, or from Bureau of Land and Water Conservation.
- Storm Water Management Act- available from Bureau of Land and Water Conservation.

Contact

Durla Lathia
Bureau of Land and Water Conservation
Phone: 717-783-7577

SURFACE MINING CONSERVATION AND RECLAMATION ACT

Authority

Pennsylvania Surface Mining Conservation and Reclamation Act
Act of May 31, 1945 (P.L. 1198, No. 418) as amended.

Provisions

To regulate surface mining of coal resources in Pennsylvania.

Permits are required for coal surface mining activities.

Effects on Designated Segments of the Allegheny River

None.

Resource/Data Availability/

Coal resources, overburden analysis, water data from surface mines, some historic data.

Contact

Fred Agnew at 783-8845.

WATER RIGHTS ACT

Authority

Water Rights Act of June 24, 1939, 32 P.S. Sections 631-641.

Provisions

The Act provides for the permitting of surface water withdrawals by public water supply agencies vested with the power, authority, right or franchise to sell water to the public. A water allocation permit is issued by the Department.

Any public water supply agency must obtain a water allocation permit from the appropriate regional office prior to commencing a surface water withdrawal. River wells which are hydraulically connected to the Allegheny River are also required to be permitted.

Effects on Designated Segments of the Allegheny River

The only effect anticipated is if a public water supply agency desires to begin or increase an existing withdrawal. A pump station/water treatment plant may have to be constructed or modified.

Resource/Data Availability

There are two lists of resource data. The first list is public water supply agencies holding permits are required to obtain permits for withdrawals from the Allegheny River. The second list is all facilities along the Allegheny River in the designated area. Other than public water supply intakes, none of the other facilities are required to obtain water allocation permits from the regional office.

Data gathered between river mile 89.5 to 197.3.

Contact

Thomas L. Denslinger, 772-4048, Bureau of Water Supply and Community Health, Division of Water Planning and Allocation.

Resource Data/Availability - Specific Allegheny River Information

Subject: Water Allocations and Filter Plants along/adjoining Allegheny River

FILTER PLANTS ON TRIBUTARIES TO DESIGNATED SECTIONS OF THE ALLEGHENY RIVER:

I. Segment From Buckaloons at Irvine to Oil City

A. South West Warren County Municipal Authority (Tidioute)

Permit: WA82A issued February 29, 1988

Source: Ben George Run

Max. Demand: 205,000 gpd

Design: 396,000 gpd

II. Segment From Franklin To Emlenton

A. Franklin Water Works (Franklin General Authority)

Permit: Order of Confirmation WA-72 issued May 12, 1943

Source: French Creek

Allocation: 3MGD

Note: Selling water to Sandy Creek Township General Authority, 200,000 gpd

B. Polk State School and Hospital

Note: No Water Allocation Permit required

Source: North Sandy Creek

Mar. Daily Use: 357,000 gpd

Design: 1.0 MGD

FILTER PLANTS ON DESIGNATED SECTIONS OF THE ALLEGHENY RIVER:

III. Segment From Franklin to Emlenton

A. Emlenton Municipal Water

Permit: WA61-675 issued November 6, 1981

Source: Allegheny River

Allocation: 600,000 gpd

Note: Downstream of Proposed River Segment. The withdrawal will not result in any interbasin transfer. Most of the water that is withdrawn will be returned to the river at the Borough sewage treatment plant approximately one-half mile downstream of the company's intake.

FILTER PLANTS ON NON-DESIGNATED SECTIONS OF THE ALLEGHENY RIVER:

IV. Oil City

Permit: WA923 issued July 9, 1992

Source: Allegheny River

Allocation: 6,000,000 gpd, reduced to 4,500,000 million after 5 years

Note: Series of river wells and a pumping station.

V. Warren

Permit: WA150 issued February 10, 1943

Source: Allegheny River

Allocation: 3,000,000 ~RPM

Note: Series of river wells and a pumping station.

Contact

Forrest Underwood, WSCH, at 814-332-6899.

SECTION 2a NON-REGULATORY AUTHORITIES

BLACKFLY SUPPRESSION PROGRAM

Authority

Blackfly Suppression Program

Provisions

To reduce the nuisance of blackfly populations on human activities.

Blackfly spray program permits blackfly spray programs.

Effects on Designated Segments of the Allegheny River

Total impacts on the aquatic environment by existing studies show minor effects. Resource/Data

Availability

Department studies and reports regarding location and impacts of blackfly spraying. Contact

Daniel H. Arbegast, 717-783-3795, Bureau of Water Supply and Community Health.

FARMLAND PROTECTION PROGRAM

Authority

Pennsylvania Farmland Protection Program Act 43 of 1981, 2 PA Code 138e

Provisions

Preserve agricultural land in its current use by ^{purchasing} conservation easements.

There is no permit required, however, the easement is enforced by a permanent deed restriction placed on property. Applicant farmers screened and selected by county agricultural land preservation boards.

Effects on Designated Segments of the Allegheny River

Implementation of program will preserve present land in agriculture use.

Resource/Data Availability

Contact

Fred Wertz at 717-787-3167.

FOREST RESOURCE PLAN

Authority

State Forest Resource Plan - Allegheny River Tract.

Administrative Code of 1929 amended May 6, 1970 (Act #120).

Provisions

Manage State Forest lands and provide continued prudent use of those resources.

Permits are required for many different activities within the watershed in regard to watershed, flora, timber and recreation.

Effects on Designated Segments of the Allegheny River

Increased protection through the management of public lands and resources.

Resource Data/Availability

See Forest Resource Plan.

- * Lists goals and objectives governing the operation of State Forest land, summarizes the resources and uses and provides historical information.
- * Provides detailed inventories and operating guidelines for the following individual resources and uses:

Recreation

Watershed Management

Fauna and Flora Management

Timber Management

Contact

Dan Devlin at 717-787-3444.

GYPSY MOTH SUPPRESSION

Authority

Gypsy Moth Suppression, Act 275 of 1970, Section 1902-A.

Provisions

Protect forest from fungi, insects and other enemies.

BT insecticide is permitted in gypsy moth spraying programs.

Effects on Designated Segments Of the Allegheny River

Adjacent lands may receive treatment.

Resource/Data Availability

Environmental Assessment Cooperative Gypsy Moth Suppression Project - 1993

Contact

Dr. Barry Towers, Chief
Division of Forest Pest Management
Bureau of Forestry
Pennsylvania Department of
Environmental Resources
34 Airport Drive
Middletown, PA 17057
717-948-3941

Peter Rush, Field Representative
Forest Health Protection
Northeastern Area, State and
Private Forestry
USDA Forest Service
180 Canfield Street
P.O. Box 4360
Morgantown, WV 26505
304-285-1541

STREAM IMPROVEMENT PROGRAM

Authority

Stream Improvement Program

Act No. 195 of June 5, 1947, P.L. 422, as amended.

Provisions

This is a non-regulating program that provides for stream clearance and stream channel rectifications.

DER, with local government cooperation, may undertake projects to improve stream channels in order to reduce flooding or remove the threat of damage from erosion to occupied buildings.

Effects on Designated Segments of the Allegheny River

None, unless specific sites are addressed in the future.

Resource/Data Availability

Approximately \$650,000 to \$800,000 is available annually (statewide) to fund construction of projects under this program.

Contact

Mike Conway at 717-783-7917 or Larry Oliver at 717-787-7432, Bureau of Flood Protection Projects.

TOPOGRAPHIC GEOLOGIC SURVEY

Resource/Data Availability

- * General Geologic Mapping - Dr. Jon Inners, 717-787-6029
- * Coal Resource Information - Albert Glover, 717-787-6029
- * Oil and Gas Information - Dr. John Harper, 412--J,t2-,J230
- * Sand and Gravel - Sam Berkheiser, 717-787-5828

SECTION 3 LOCAL REGULATIONS (ZONING AND SUBDIVISION ORDINANCES)

Authority

Pennsylvania Municipalities Planning Code, Act of 1988, P.L. 805, No. 247.

Provisions

To empower cities, boroughs, incorporated towns, townships, and counties individually or jointly, to plan their development and to govern the same by zoning, subdivision and land development ordinances, providing for the establishment of planning commissions, planning departments, planning committees and zoning hearing boards.

Township may adopt county zoning and subdivision ordinances or create a township planning commission to form their own ordinances or modify county ordinances for their township.

In any municipality, other than a county, which enacts a zoning ordinance, no part of the municipality shall be left unzoned. Different provisions of zoning ordinances can however be applied to zoning districts.

Following are zoning and subdivision ordinances which boroughs, counties, and townships have adopted.

VENANGO COUNTY

There is a county-wide subdivision and Land Development Ordinance which pertains to each municipality except for the cities of Franklin and Oil City which have their own subdivision regulations. This county-wide ordinance provides for subdivision and land development review prior to construction. Section 402 of the County Subdivision and Land Development Ordinance states: "existing natural features such as trees, steep slopes and water courses shall be conserved as a conservation measure except to the extent that their removal or modification is functionally related to the harmonious design of the subdivision."

There is no county-wide zoning. Municipalities with local zoning ordinances bordering the designated sections of river are:

Cornplanter Township
Cranberry Township
Oil City
Sandy Creek Township
Emlenton Borough

Some sections of the Allegheny River flowing through these townships are zoned "Conservation" which promotes open land, non-industrial, low density type uses.

WARREN COUNTY

Warren County has a County Subdivision Ordinance and a County Zoning Ordinance. Municipalities along the Allegheny W&SR which have adopted the zoning ordinance are:

Glade Township
Mead Township
Pleasant Township
Tidioute Borough

Sections of the river zoned "residential" or "agricultural - conservation - recreation ACRC)" have the following limitations:

- A. Business is limited to home based occupations, farming or one featuring recreation.
- B. Residences within an ACR zone must be built on lots greater than 40~000 square feet. Any existing lot which contains less than 40~000 square feet in area is classified as a nonconforming lot. A nonconforming lot may be used for the erection of a structure which conforms to the use regulations of the zoning district~ however~ the structure shall comply with all other applicable regulations of the zoning ordinance for the District in which it is located.
- C. Industrial development is strictly limited although zoning map amendments may be granted by County Commissioners.

FOREST COUNTY

This narrative summary only provides information for those municipalities, including the County, which border, at least in part, the designated sections of the Allegheny River corridor as "Recreational" within the corporate boundaries of the County.

The County of Forest has a Subdivision and Land Development Ordinance, administered by the Forest County Planning Commission. Forest County has within its boundaries a total of nine (9) municipalities, comprised of eight (8) Townships and one (1) Borough.

Municipalities along the Allegheny (Wild and Scenic) River corridor are Tionesta Township, Tionesta Borough, Harmony Township, and Hickory Township.

The County's Subdivision Ordinance is implemented in all of the municipalities within the County with exception of Hickory Township, which has its own Subdivision and Land Development Ordinance, and administered by the Board of Hickory Township Supervisors.

The County-wide Subdivision Ordinance provides for subdivision and land development review and approval by the Planning Commission prior to recording, the sale of lots, and the start of construction, with exception of Hickory Township.

There are no County-wide Zoning Regulations.

Only one municipality bordering the Allegheny River, Tionesta Borough, has a Zoning Ordinance. The Borough Zoning Officer administers this ordinance. Also, the Borough has a Planning Commission Board, but to date has not yet adopted a Subdivision Ordinance.

Additionally, Tionesta Township, Harmony Township and Hickory Township have Building Ordinances which may have some restrictions relative to subdivision and zoning requirements.

AGENCIES TO CONTACT FOR INFORMATION AND SUPPORT

The following agencies and organizations have the responsibility and the expertise to provide technical assistance or support in the subject areas indicated.

FEDERAL AGENCIES

1. U.S. Army Corps of Engineers

Management of Kinzua Dam Visitor Center and boat access site; and

Provides information to riparian landowners and river users on significant water level changes, reasons for the changes in water discharge effects on fish species.

2. USDA Forest Service

Information on integrated forest pest management programs to foster an understanding of appropriate treatments for insect and disease problems; and

Information and guidelines for protecting and enhancing riparian forest buffers.

3. USDA Natural Resources Conservation Service (formerly the Soil Conservation Service)

Information on streambank stabilization and revegetation techniques using native species;

Information about the use of Best Management Practices (BMPs) on farm land within and bordering the river;

Assistance with rural conservation and improvement projects through the Penn Soil Resource Conservation and Development program; and

Assistance through the Watershed Protection Program to mitigate water quality problems from acid mine drainage on tributary streams in the corridor.

4. USDI Fish and Wildlife Service

Monitors federally listed threatened, endangered and sensitive species within the corridor;

Provides information on threatened, endangered and sensitive species and;

Consultation for proposed federal projects regarding likely effects on threatened, endangered and sensitive species.

STATE AGENCIES

1. PA Department of Conservation and Natural Resources (formerly Bureau of Forestry, Department of Community Affairs - Recreation and Conservation, and PA Scenic Rivers Program)

Manages boat-to camping, trail system and provides public information at the Allegheny Tract of the Clear Creek State Forest;

Administers the PA Forest Stewardship Program in the river corridor;

Administers the PA Rivers Conservation Program including technical assistance and direction for river implementation activities;

Administers Keystone Recreation, Park and Conservation Fund; and

Administers PA Rails-to-Trails Grant in Aid program.

2. PA Department of Environmental Protection (Former DER regulatory agencies)

Provides public awareness of existing land use regulations pertaining to watercourses and adjacent riparian areas, including administration of required state permits within the corridor; and

Provide consistent and fair enforcement of existing regulations.

3. PA Department of Transportation

In cooperation with townships, reviews opportunities for reducing impacts from road run-off and maintenance activities; and

Assists with road and bridge signing needs.

4. PA Fish and Boat Commission

Provides public fishing and boat access and manages Fish and Boat Commission access sites;

Provides public information to promote safe and responsible use of Commonwealth waters by the public;

Manages Pennsylvania's aquatic resources and administers the "Adopt A Stream Program"; and

Enforces the PA Fish and Boat Code, including provisions of the Pennsylvania Clean Streams Act, Chapter 102, and the Pennsylvania Dam Safety and Encroachment Act, Chapter 105.

5. PA Historical and Museum Commission (PHMC)

The State Historic Preservation Officer (SHPO) is the Executive Director of the PHMC, and the SHPO's responsibilities to review, comment and advise are fulfilled by the Bureau for Historic Preservation (BHP). Upon notification of an undertaking by an agency (or its applicants for funding or licenses) the BHP reviews the action for its effect on potentially eligible cultural resources and provides comments to the agency regarding the presence of resources and the need for studies to locate or evaluate resources. For archaeological sites, recommended studies may include archaeological survey, limited testing, and excavation. The BHP generally coordinates with the agency or applicant regarding the scope of work and reviews and comments on the adequacy of the methods and results of the studies.¹

¹ Bureau For Historic Preservation, Pennsylvania Historical and Museum Commission. July 1991. Cultural Resource Management in Pennsylvania: GUIDELINES FOR ARCHAEOLOGICAL INVESTIGATIONS. Harrisburg, PA.

SHPOs administer the national historic preservation program at the state level, review National Historic Register of Historic Places nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with federal agencies during Section 106 review.

6. Pennsylvania Game Commission

For public information on wildlife management, game protection, and game regulations.

LOCAL AGENCIES

1. Counties

Through county planning offices: develops comprehensive planning and zoning ordinances, provide technical assistance to townships for comprehensive planning and zoning, and provide technical assistance for grant writing;

Coordinate feasibility studies and development plans for trails-to-trails opportunities;

Through county conservation districts, administer State Erosion and Sedimentation Plan requirements, and assist with Forest Stewardship Program;

Through county conservation districts, administer the General Permit Program; General Permits applicable to the corridor are:

- GP-1 Fish habitat enhancement structures
- GP-2 Small docks and boat-launching ramps
- GP-3 Bank rehabilitation, bank protection, and gravel bar removal
- GP-4 Intake and outfall structures*
- GP-5 Utility line stream crossings*
- GP-6 Agricultural crossings and ramps*
- GP-7 Minor road crossings*
- GP-8 Temporary road crossings
- GP-9 Agricultural activities** -

* Regular Permits are required within 100 feet of the Wild and Scenic River

** Regular Permits are required in water courses having a drainage area greater than 100 acres

Coordinates county-level planning (i.e. Forest County Action Plan); and

Enforces local subdivision and zoning ordinances.

3. Townships

Enforce local ordinances prohibiting illegal dumping; and

Have the responsibility for road maintenance activities, which includes the prevention of water pollution resulting from those maintenance activities.

ORGANIZATIONS

1. Allegheny Valley Trails Association, Penn Soil Resource Conservation and other rails-to-trails interests

Provide cooperative trail development where feasibility has been determined and conduct feasibility studies for other areas of the corridor.

2. Chambers of Commerce and Tourist Promotion Agencies (TPAs)

Coordinate compilation and distribution of recreational information; and

Market recreational opportunities to promote tourism for rural economic development.

3. Oil Region Heritage Park (ORHP)

Implements the ORHP action plan which includes:

The development of an interpretation and standardized signing program for the Allegheny River corridor from Oil City to Emlenton;

In cooperation with the townships and counties, providing for the enhancement of recreational opportunities in the corridor; and

The promotion of recreational opportunities in the corridor to stimulate economic development through increased tourism.

APPENDIX F

EXCERPTED FOREST PLAN STANDARDS AND GUIDELINES FOR
MANAGEMENT AREAS 5, 6.1, 6.4, 7, & 8 ¹ AND THE
INCORPORATION OF ADDITIONAL STANDARDS AND
GUIDELINES TO BE USED ON FEDERAL LANDS WITHIN THE
ALLEGHENY WILD AND SCENIC RIVER CORRIDOR

¹ Allegheny National Forest Land and Resource Management Plan, March 1986

APPENDIX F

EXCERPTED FOREST PLAN STANDARDS AND GUIDELINES FOR MANAGEMENT AREAS 5, 6.1, 6.4, 7, & 8 ² AND THE INCORPORATION OF ADDITIONAL STANDARDS AND GUIDELINES TO BE USED ON FEDERAL LANDS WITHIN THE ALLEGHENY WILD AND SCENIC RIVER CORRIDOR

INTRODUCTION

The Allegheny Land and Resource Management Plan (USDA Forest Service, 1986) has standards and guidelines for managing the various management areas on the Forest. Five of these management areas are found within the designated sections of the Allegheny Wild and Scenic river corridor. Listed below are the descriptions of these management areas and the accompanying standards and guidelines for management. These standards and guidelines can be used as a reference by private individuals wishing to design a management plan for their land.

MANAGEMENT AREA 5

DESCRIPTION FOR MANAGEMENT AREA 5

The emphasis in this management area is to provide a natural ecosystem in Congressionally designated Wilderness.

The primary purpose is to:

- Preserve natural ecosystems.
- Protect the Wilderness character for future generations.
- Provide a Wilderness experience in a natural-appearing, unmodified environment within a semi-primitive non-motorized recreation setting.

The existing stands of hardwoods, if managed under this goal, will eventually provide extensive old growth stands of oak, sugar maple, beech, and hemlock. Valley bottoms now interspersed with openings may eventually be transformed through succession into stands of tolerant species. Visitor use areas will maintain a near natural appearance.

Existing openings left from early oil and gas and logging production (i.e., old roads, railroad grades, pipelines, oil well sites, power houses, rodlines, and cleared rights-of-way) have and will continue to slowly revert to a natural Forest condition.

Facilities such as pedestrian trails, campsites, signing will provide a way to disperse recreation use throughout the areas. Recreationists will be involved in non-motorized activities such as dispersed camping, hiking, cross-country skiing, fishing, hunting, nature appreciation, viewing wildlife, and viewing scenery.

Administrative and law enforcement activities may occur where needed to maintain the natural character and integrity of the ecosystem.

No utility corridors or road rights-of-way will be permitted. Private rights will be honored.

² Allegheny National Forest Land and Resource Management Plan, March 1986

STANDARDS AND GUIDELINES FOR MANAGEMENT AREA 5

(An asterisk designates standards taken from the Eastern Regional Guide.)

EXTERNAL RELATIONS

Search & Rescue

Motorized and mechanical equipment may be used only in life threatening situations for search and rescue with Forest Supervisor approval. Operations will be coordinated with local county sheriff. The Forest Service will maintain control of search and rescue operations in Wilderness areas.

- Horses or helicopters will be favored over wheeled vehicles.
- If vehicles are required, either snowmobile or low pressure balloon tires will be favored.

Human & Community Development

Volunteers and personnel from other programs hosted by the Forest Service could be used to accomplish needed work within the river corridor. Encourage participation in the Pennsylvania Fish and Boat Commission's "Adopt-a-Stream" program and the DER Water Monitoring Program.

Provide technical assistance as requested to landowners desiring to implement corridor guides.

INFORMATION SERVICES

Information will generally be provided through the use of the Recreation Opportunity Guide, maps, brochures, etc.

Interpretive information, if provided, will be outside of Wilderness boundaries.

Publications should emphasize:

- Outdoor ethics and no-trace camping;
- Weekday and winter use to those seeking more solitude; and
- Orienteering as a way to minimize use impacts, reduce people encounters, and increase solitude experience.

The information services provided for the Allegheny Wild and Scenic River are intended to satisfy the three information needs of users of the Allegheny River corridor. These needs are: directional, behavioral, and interpretive. The services will inform river users of recreational opportunities and laws and regulations pertaining to specific activities. Information will be provided through a variety of media, including but not limited to signs, brochures, personal contacts, and news media.

- *An information system using a variety of media should be developed for river users that would identify public lands, recreation opportunities, public facilities, landmarks on the river, trail opportunities, regulations, safety messages, and special features/points of interest.*
- *All information media should emphasize "Leave No Trace", respect for private property rights, and water safety throughout the corridor.*
- *Information and Interpretive media will be coordinated with the local agencies, Chambers of Commerce, Tourist Promotion Agencies, Oil Region Heritage Park, State agencies etc. to assure accuracy and eliminate redundancy.*
- *Design an Allegheny River brochure that lists the three classifications of Wild and Scenic Rivers, and explains that the Allegheny has a "recreational" classification, identifies the values that made the river worthy of being*

a National Wild and Scenic River, tells why it needs to be protected and what the user can do to protect it, and includes information on sensitive, threatened and endangered species.

- *The Forest Service will cooperate with the Oil Region Heritage Park and others to develop an interpretation plan for the river that will be consistent throughout it's length. Interpretive information may include such themes as the riverine ecosystem, the outstanding remarkable values, cultural history, or the Allegheny Islands Wilderness.*

LAND AND RESOURCE MANAGEMENT PLANNING

Vegetative Management

*Manage vegetation only to protect Wilderness values or to protect adjacent property from fire or pests.

Natural succession will be allowed to proceed as the dominant process.

Use native plants for temporary soil stabilization. Annuals will be used so as to favor natural succession.

Planning

An operating plan will be prepared for each Wilderness to direct implementation of Forest Plans and to guide routine activities.

ENVIRONMENTAL MANAGEMENT

Air Quality

The Forest Supervisor will coordinate with the Commonwealth of Pennsylvania on potential air pollution impacts to wilderness resources.

Pesticide Use

*Use pesticides in designated Wilderness only when necessary to prevent the loss of significant aspects of the designated Wilderness or to prevent significant losses to resource values on private or public lands bordering the Wilderness. Obtain Regional Forester approval for all pesticide applications in Wilderness.

Normally endemic forest pests will not be controlled.

RECREATION MANAGEMENT

Opportunities

*Feature semi-primitive non-motorized ROS class recreation opportunities. Allow recreation use consistent with protecting Wilderness values.

Current conforming use patterns will be allowed to continue until use reaches carrying capacity, overuse occurs, or visitor conflicts arise.

A range of management options will be considered when unacceptable environmental damage or significant user dissatisfaction results. The emphasis will be on (1) educational approaches - signing, brochures; (2) natural resource modification - closing trails, restoration, tent pads; and (3) use of regulatory approaches - law enforcement, permit system, only if others fail.

Use of any motorized vehicles and equipment is prohibited. In addition, bicycling, hang gliding, and use of temporary roads or aircraft landing sites is prohibited.

Camping and day use will be permitted on the Allegheny River Islands, and non-motorized watercraft may be landed on the shoreline.

Emphasize a "Leave No Trace" policy where users are required to haul away their own trash and leave no trace of their visit.

Trails

*Trail management will be compatible with the ROS objective of the area.

Trail types appropriate to this management area are:

Pedestrian Summer
Pedestrian Winter

Trails may include two difficulty classes of More and Most Difficult experiences within the semi-primitive non-motorized ROS class.

Off-Road Vehicles (ORV)

ORV use will not be permitted.

Cultural Resources

*Cultural resources will be evaluated for the National Register of Historic Places.

*Assess the nature and degree of damage to cultural resources caused by vandalism, visitor use, and natural deterioration and identify protective measures to be implemented.

*Cultural resource values within a Wilderness may be stabilized and preserved when these values are compatible with and enhance Wilderness values.

*On-site cultural resource interpretation will not occur.

No scientific excavations will occur unless justified by providing scientific information not likely to be found elsewhere. Any digs will be promptly restored to natural condition.

*Visual Quality

*Management activities should meet the visual quality objective of preservation or retention for all sensitivity levels, distance zones, and variety classes.

Vegetation will be allowed to evolve naturally within the forested riparian buffer, unless restoration work is necessary. Restoration work will use native plants. Maintain or enhance the streambank vegetation that provides screening of man-made facilities and activities.

*Maintain or enhance the integrity of the Landscape Types 1 - 3 (see pages **-**) by allowing changes consistent with the future condition descriptions (see pages **-**).*

Landscapes within the corridor will be managed under the visual quality objective of Retention which recommends that management activities not be visually evident to the average visitor. Any management activity or development should be designed to blend with the form, line, color and texture of the natural surroundings.

TIMBER MANAGEMENT

*Timber is not harvested under this management goal.

Salvage of timber damaged as a result of fire, storm, or pests will not occur, except to protect Wilderness values or to protect adjacent property from fire or pests.

Firewood

Firewood may be gathered in Wilderness, but only for use within the Wilderness boundary. If significant resource damage is expected, gathering may be restricted by Forest Supervisor order.

SOIL AND RESOURCE MANAGEMENT

*Control measures to mitigate erosion will be commensurate with the soil characteristics, expected use, and management objectives of the area.

*Limit watershed improvement projects to correcting problems caused by people and natural disasters that threaten downstream health and safety. Abandoned oil and gas wells on federal mineral ownership will be plugged if the wells pose a safety hazard or are polluting surface or ground water.

Current water quality will be maintained in the Hickory Creek Watershed to protect instream values. Variation in water quality may occur in response to natural elements.

Riparian Area Management

Public use of specific areas may be limited to protect water quality.

Trails will be located to protect soil and water quality values.

Riparian areas will be managed to protect the natural condition of riparian ecosystems. Creation or enhancement of riparian-dependent resources, such as wildlife or fish habitat, is generally not appropriate.

WILDLIFE MANAGEMENT

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Fish and wildlife habitat management may occur to the extent it is consistent with Wilderness management objectives and to meet the needs of threatened and endangered species.

- Wildlife habitat will not be manipulated except for T&E species.
- Hunting, fishing, and trapping may occur subject to applicable state and federal laws.
- Stocking of fish will be permitted to re-establish or supplement native populations when determined necessary by the Forest Service and the Pennsylvania Fish and Boat Commission. Stocking will be in accordance with the provisions of the Wilderness Act.
- Winter recreational use will be discouraged on the islands if it interferes with Bald Eagle populations. Impacts of recreational use on the islands with respect to spring and fall osprey migrations will be monitored. Restrictions will be implemented as necessary.
- Existing wildlife improvements will not be maintained and will be allowed to revert to natural conditions.

SPECIAL USES MANAGEMENT

*Utility Transmission Corridors

*Corridors for reservoirs, water conservation works, power projects, transmission lines, and other facilities are not permitted, except as authorized by the act establishing the Wilderness or in accordance with private rights.

*Other Special Uses

*Special uses in Wilderness areas will not be permitted, except as authorized by the act establishing the Wilderness and will be considered on an individual basis.

Outfitter or other commercial permits may be issued if compatible with Wilderness objectives and if they provide for protection of Wilderness attributes.

MINERALS AND GEOLOGY

Federal Minerals

The Pennsylvania Wilderness Act of 1984 withdrew all leasing authority for Federal minerals located within the Hickory Creek or Allegheny Islands Wilderness Areas. Rock sources within the wilderness areas will not be used or developed.

Private Minerals

The Pennsylvania Wilderness Act of 1984 directed the Secretary of Agriculture to purchase all of the outstanding mineral rights, on a willing seller basis, under the Hickory Creek and Allegheny Islands Wilderness Areas.

If private development occurs, the goal for Forest Service administration is to reduce the impacts of development on visual quality, recreation opportunities, watershed values, and wildlife habitat, while honoring private rights.

At least 60 days in advance of proposed development, the developer will provide the Forest Service with a Plan of Operations. The Plan of Operations must be approved by the Forest Service before any surface disturbing activities begin. In addition to those items specified in the forest-wide standards and guidelines, the Plan will address the following:

Schedule of Activities and Staging of Operations

The staging of well construction will be provided in the Plan of Operations. At any one time, no more than five well sites and accompanying access roads will be cleared in advance of actual drilling operations. Each five-well package will be handled as a single timber sale payment unit.

In the vicinity of developed recreation sites or areas receiving heavy recreation use, the Forest Service may impose restriction on the hours, days, or season of operation in order to reduce impacts on recreationists.

Water for hydrofracturing will be stored in tanks.

Production and Collection Facilities

Visual impacts of facilities will be reduced to the extent possible by siting, vegetative screening, or other methods. All above-ground facilities will be painted with earth-tone colors. Construction materials will meet visual quality requirements.

Roads will be gated and will be used only for oil and gas production activities.

Tank batteries will be located outside wilderness areas whenever where possible. Tanks and separators will be located on one site in the development. Tank hatches will be locked.

Where possible, all utility and collection lines will be buried at a minimum depth of three feet and marked with Terra tape or its equivalent. Surface lines may be permitted if boulders, topography, or other conditions

make burial impractical or infeasible. Lines will be located in road rights-of-way. Lines may be located outside of rights-of-way if no new corridor clearing is required for their installation.

Pump jacks will be powered by electric motors and signed to warn the public of automatic operation.

Natural gas that is not utilized on the development or marketed will be flared.

Methods for Waste Disposal

All produced water will be contained in tanks and disposed of outside Wilderness areas by state-approved methods.

Stumps will be buried in an approved location or removed from the Wilderness areas. Slash will be lopped to within three feet of the ground and scattered.

Excess or unused materials, litter, and trash will be promptly removed from the development and disposed of properly.

Surface Restoration Plan

The goal of surface restoration is to restore the natural landform and facilitate the establishment of forest vegetation.

A bond to guarantee stabilization and final restoration of disturbed areas will be required on all developments.

Restoration plans will include removal of all equipment and facilities, recontouring of roads and well sites, and revegetating all disturbed areas. In order to restore forest vegetation, methods such as scarification, fertilizing, mulching, liming, direct seeding, or planting shrubs and trees may be necessary. Native plant species will be used when seed or planting stock is available.

Any equipment or facility not used for a period of one year is considered abandoned and must be removed by the owner within 90 days of notification.

RESEARCH

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The Forest will actively cooperate with research intended to develop basic knowledge on ecological processes, human behavior, or Wilderness management problems.

All proposed projects will be reviewed to determine if essential in a Wilderness environment.

Approved projects will be conducted in a manner compatible with the preservation of a Wilderness environment.

There are three candidate Research Natural Areas (RNAs) located within the Allegheny Islands and Hickory Creek Wilderness Areas. They are:

- Crulls Island (96 acres)
- Thompson Island (67 acres)
- Sheffield Compartment 126 (276 acres)

These areas are only under study and must receive a thorough evaluation before being officially designated "RNA" by the Chief of the Forest Service. No actions will be taken that may affect their suitability or capability to be so designated. For additional information, consult the Final EIS, Chapter 3, Section B - "Special Areas".

The primary purpose of an RNA is to preserve unique ecosystems for scientific purposes. The Northeastern Forest Experiment Station will be responsible for the management of all designated RNAs.

FIRE MANAGEMENT

Wildfire detection and suppression will be commensurate with the resource value to be protected. Detection and suppression will be planned, based on an analysis of probable fire locations, expected fire intensities, potential net resource value change, and potential threat to health, safety, and adjacent properties.

All fire suppression activities will be in accordance with established Wilderness policy.

- Fire suppression will be by non-motorized means.
- Regional Forester approval is required for use of tractors, plows, tracked, or mechanized equipment.
- Disturbance to soil and vegetation created by fire suppression will be rehabilitated as soon as possible using nonmechanical means and native plant species.
- If fuel buildup becomes a problem, those areas may be closed to open fires.

LAND OWNERSHIP

Subsurface

Private mineral rights will be acquired within Wilderness areas to protect Wilderness values as specified in the designating legislation.

ENGINEERING OPERATIONS

Surveying

Wilderness boundaries will be marked to a standard that will allow for identification.

- Wilderness boundaries will be surveyed only where and when there is a threat of encroachment by other activities.
- Wilderness boundaries will be posted at 100 foot intervals adjacent to private lands and at 300 foot intervals along roads.

Signs

Trail signs may be provided within Wilderness boundaries.

- All signs will conform to Wilderness standards of rustic routed wood.
- Signing within areas will be kept to a minimum and primarily used for direction and safety.
- Each of the Wilderness islands will be identified as belonging to the system.
- Painted trail blazes are generally inappropriate within Wilderness areas. Trails will be marked with axe blazes or rock cairns.
- *Develop sign plan for the river corridor including inventory of existing signs, analysis of needs and standards of future signing.*
- *Through signing, brochures and maps, provide distances between various river features and access sites for convenience and safety of river users.*
- *All informational signing within the river corridor on National Forest will be uniform in color and design as provided in the Forest Service Sign Handbook and River Sign Plan (To be developed). Signing along roads, trails and within recreation sites should be simple, easily read and organized.*

Solid Waste

Sewage systems will not be developed.

BUILDINGS AND STRUCTURES

*No buildings or structures will be constructed, except as authorized by the act establishing the Wilderness.

PUBLIC HEALTH AND POLLUTION CONTROL ACTIVITIES

*Water Supply

*Drinking water sources will not be developed.

*Emphasize and promote use of the carry-in/carry-out method of disposal.

*Solid Waste

*Landfill disposal sites will not be provided.

Biodegradable waste from dispersed recreation use may be burned or buried by users. Plastic, metal, and other waste must be carried out. Additional waste disposal regulations may be ordered by the Forest Supervisor to protect the Wilderness experience and environment.

WATER STORAGE AND TRANSMISSION

Dams

No dam construction will occur.

TRANSPORTATION

Roads

System:

All roads will be eliminated from designated Wilderness areas, excepting those necessary for oil and gas recovery on outstanding rights or on private property.

MANAGEMENT AREA 6.1

DESCRIPTION FOR MANAGEMENT AREA 6.1

The emphasis in this management area is to provide a land condition with vegetation predominantly made up of mature or overmature hardwood forests.

The primary purpose is to:

- Maintain or enhance scenic quality.
- Emphasize a variety of dispersed recreation activities in a semi-primitive motorized setting.
- Emphasize wildlife species which require mature or overmature hardwood forests, such as turkey, bear, cavity-nesting birds, and mammals.

Since timber management activities will be for wildlife habitat improvement, much of the Forest will generally progress to a mature hardwood type. Scattered herbaceous, shrub, and conifer inclusions will be evident due to the wildlife habitat improvement practices. In portions of the area, small stands of hardwoods in a variety of age classes will be evident from implementing timber practices to benefit wildlife.

State, township and Forest Service administered arterial and collector roads may be located within this management area. Forest Service local roads, Traffic Service Level (TSL) "D", will be closed to all public traffic except for certain seasonal exceptions.

Recreational facilities will generally be limited to those necessary to provide access into the area or to protect resources such as trails, trailhead facilities, and primitive campsites, vault toilets, and spring or hand pump water systems.

Utility corridors and low intensity development of oil and gas fields may be evident within the area.

Seasonal wildlife habitat improvement and maintenance will include such activities as shrub and conifer planting, release treatments, and food plot maintenance. Timber harvesting to enhance wildlife habitat will occur periodically in some locations.

Road and trail construction and maintenance will occasionally be evident. Administrative and law enforcement activities will occur.

Recreational opportunities will include dispersed activities such as cross-country skiing, backpacking, hiking, fishing, hunting, and ORV trail riding.

A variety of game and non-game wildlife species may be seen that are characteristic of mature forested habitat including squirrel in the oak type and non-game birds in all types.

Specialized habitats and inclusions within the management area will receive treatments to specifically benefit small game, non-game, indicator species, or species of special concern.

Activities, such as right-of-way maintenance, oil/gas well hydrofracturing, drilling and maintenance, will occur but will be a minor part of the total activity in the area.

STANDARDS AND GUIDELINES FOR MANAGEMENT AREA 6.1

HUMAN AND COMMUNITY DEVELOPMENT

Volunteers and personnel from other programs hosted by the Forest Service could be used to accomplish needed work within the river corridor. Encourage participation in the Pennsylvania Fish and Boat Commission's "Adopt-a-Stream" program and the DER Water Monitoring Program.

Provide technical assistance as requested to landowners desiring to implement corridor guides.

INFORMATION SERVICES

The information services provided for the Allegheny Wild and Scenic River are intended to satisfy the three information needs of users of the Allegheny River corridor. These needs are: directional, behavioral, and interpretive. The services will inform river users of recreational opportunities and laws and regulations pertaining to specific activities. Information will be provided through a variety of media, including but not limited to signs, brochures, personal contacts, and news media.

- Develop a sign plan for the river corridor including inventory of existing signs, analysis of needs and standards of future signing .*
- Provide signing at access sites that informs users of the site location within the corridor, river regulations including water safety, emergency services, special interpretive features, and activities available in the area.*
- Provide signing on the river to enable river users to locate and land safely at the public access sites.*
- Through signing, brochures, and maps provide distances between various river features and access sites for convenience and safety of river users.*
- All informational signing within the river corridor on National Forest will be uniform in color and design as provided in the Forest Service Sign Handbook and River Sign Plan (To be developed). Signing along roads, trails and within recreation sites should be simple, easily read and organized.*
- An information system using a variety of media should be developed for river users that will identify public lands, recreation opportunities, public facilities, landmarks on the river, trail opportunities, regulations, safety messages, and special features/points of interest.*
- All information media should emphasize "Leave No Trace or Pack-in Pack-out", respect private property rights , and water safety throughout the corridor.*
- Information and Interpretive media will be coordinated with the local agencies, Chambers of Commerce, Tourist Promotion Agencies, Oil Region Heritage Park, State agencies etc. to assure accuracy and eliminate redundancy.*
- Design an Allegheny River brochure that lists the three classifications of Wild and Scenic Rivers, and explains that the Allegheny has a "recreational" classification, identifies the values that made the river worthy of being a National Wild and Scenic River, tells why it needs to be protected and what the user can do to protect it, and includes information on sensitive, threatened and endangered species.*
- The Forest Service and the Pennsylvania Department of Environmental Resources will cooperate with and encourage riparian landowner organizations, local Chambers of Commerce, local governments, trail*

organizations, organized fishing groups, outfitters and guides, commercial establishments etc., to develop appropriate means of meeting the river users' recreational and informational needs.

- The Forest Service will cooperate with the Oil Region Heritage Park and others to develop an interpretation plan for the river that will be consistent throughout it's length. Interpretive information may include such themes as the riverine ecosystem, the outstanding remarkable values, cultural history, or the Allegheny Islands Wilderness.

(On private land, it is recommended that signs should at least compliment the color and basic design of those on the National Forest and carry the Wild and Scenic River logo.)

LAND AND RESOURCE MANAGEMENT PLANNING

Vegetative Management Planning

*Limit whole tree removal to soils with sufficient nutrient content and nutrient storage capacity to support the new stand of vegetation and maintain soil productivity.

The current aspen component should be retained.

Within aspen inclusions, 20 percent of the area should be in the 0-9 year age class, and 20 percent of the area should be in the 10-19 year age class. Regeneration cuts should be relatively small (up to 10 acres in size).

Regeneration cutting of aspen should be done during the dormant season. Retain at least one downed log in each regeneration cutting. Each such log should be more than 10 inches in diameter.

Old growth habitat should be provided on a minimum of 10 percent of the area and should comprise at least 100 of each 1,000 acres.

Retain the following snags per acre:

<u>Tree Size</u>	<u>No. Snags</u>
10" to 16" DBH	3
18" to 24" DBH	3
Greater than 24" DBH	3

RECREATION MANAGEMENT

Recreation Opportunities

*Location of recreational developments will be determined with priority given to correcting health and safety problems, protecting the environment, complementing prescribed recreation opportunities, and meeting public demand.

*Selected areas, trails, and roads may be closed where appropriate to motorized vehicles during specific periods, such as hunting seasons, to provide for non-motorized experiences.

Provide opportunities for a semi-primitive motorized ROS class recreation experience. The roads necessary for wildlife management make the recreation setting a motorized class. Occasionally, local roads will remain open for access or to provide ORV opportunities. Hiking, skiing, hunting, and mountain biking will be encouraged on closed roads.

Three dispersed recreation management intensities were options within this area which varied by quantity and quality of trail building and recreation management.

- Low Intensity is defined as maintaining the current investments. We would maintain the existing trail system and would not develop any new trails.
- Medium Intensity is mid-way between Low and High Intensity.
- High Intensity established the upper limit on trail densities for each prescription by the respective Recreation Opportunity Spectrum (ROS) class.

If high intensity oil and gas development occurs in this management area, we will make no new recreation investments. Manage using a low recreation management intensity.

The output objectives and the proposed and probable practice amounts are a result of the high intensity being selected.

Recreation Sites

Recreation sites may be provided at development scale 3 or less. Some of the reservoir campgrounds which can be reached only by boat are within this management area. Generally these sites will be less than 50 campsites, will have vault toilets, carry-in and carry-out garbage policy, and hand pump water supply.

Maintenance of sites will follow guidelines contained in FSM 2330, referenced handbooks, and ED&T #9099 titled "Cleaning Recreation Sites." Sites may be closed for economic or safety reasons.

Alternative 2 proposes the development of two new access sites within the ANF proclamation boundary: 1) Tanbark and 2) Indian Valley.

- *Facilities provided for recreational activities will be compatible with the management objectives of this document.*
- *Recreational facilities will be designed to accomplish the future condition described on pages 27-28 of the Draft Management Plan.*
- *Emphasize a "Leave No Trace" policy where users are required to haul away their own trash and leave no trace of their visit. ("Leave No Trace" is a national program used by various federal agencies.)*
- *Riparian vegetative buffers will be restored and maintained at access sites to screen man made elements as seen from the river.*
- *Where feasible, boat launch sites will be designed to accommodate motorized watercraft as well as non-motorized watercraft.*
- *Design of all facilities should generally be in keeping with the surrounding form, line, color and texture of the river environment.*
- *Maintain dispersed campsites to standards that protect the natural resources, respect private property, and maintains or enhances the recreation experience opportunities being provided. Develop a dispersed campsite management plan that includes inventory, analysis and recommendations for management standards.*

Trails

*Trail management will be compatible with the ROS objective of semi-primitive motorized.

Trail types appropriate to this management area are:

Motorized Summer
Pedestrian Summer
Equestrian Summer
Motorized Winter
Pedestrian Winter

The choice of which type to construct will be based on analysis of demand, existing supply (both public and private), suitable locations, plans of other agencies and plans of private sector at the time of implementation.

Trails may include all three difficulty classes of Easiest, More, and Most Difficult to provide a full range of experiences.

*Off-Road Vehicles (ORV)

Off-road vehicle trails will not be designated in either the Minister Valley or Clarion River undeveloped areas. The Minister Valley Area is that portion of Management Area 6.1 which is located in the Minister Creek Valley north of State Route 666. The Clarion River Area is that portion of Management Area 6.1 along the Clarion River that is east of the powerline which goes to Portland Mills and south of Township Road T-307 and LR 24002 between Hallton and Ridgway.

*Cultural Resources

*Priorities will be set for evaluation of cultural resources for the National Register of Historic Places.

*Assess the nature and degree of damage to cultural resources caused by vandalism, visitor use, and natural deterioration and identify protective measures to be implemented.

*Interpretation of cultural resources should be compatible with the natural character and recreation opportunities of this area.

Visual Quality

Management activities should meet the Visual Quality Objectives (VQO) displayed in the chart below by sensitivity levels, distance zones, and variety classes.

VARIETY CLASS	SENSITIVITY LEVEL & DISTANCE ZONE					
	<u>FG1</u>	<u>MG1</u>	<u>BG1</u>	<u>FG2</u>	<u>MG2</u>	<u>BG23</u>
Class A	R-	R	R	R	R	PRPR
Class B	R	PR	PR	PR	PR	MM
Class C	PR	PR	PR	PR	M	MM

Visual Quality Objectives - (R) Retention, (PR) Partial Retention, (M) Modification, (MM) Maximum Modification
Variety Class - (A) Distinction, (B) Common, (C) Minimal
Visual Distance Zone - (FG) Foreground, (MG) Middleground, (BG) Background
Sensitivity Level - (1) Most Sensitive, (2) Sensitive, (3) Least Sensitive.

Vegetation will be allowed to evolve naturally within the forested riparian buffer, unless restoration work is necessary. Restoration work will use native plants. Maintain or enhance the streambank vegetation that provides screening of man-made facilities and activities.

*Maintain or enhance the integrity of the Landscape Types 1 - 3 (see pages **-**) by allowing changes consistent with the future condition descriptions (see pages **-**).*

Landscapes within the corridor will be managed under the visual quality objective of Retention which recommends that management activities not be visually evident to the average visitor. Any management activity or development should be designed to blend with the form, line, color and texture of the natural surroundings.

TIMBER MANAGEMENT

Silvicultural Systems

Even-aged and uneven-aged silvicultural systems will be used to achieve the wildlife and recreation management objectives.

Even-aged management will be used to benefit wildlife by increasing horizontal habitat diversity. It fulfills important habitat requirements for the wild turkey, black bear, white-tailed deer, management indicator species, and a variety of other small-game and non-game species. It may be used also for increasing visual diversity and providing viewpoints for recreationists in desirable locations.

If even-aged management is practiced, openings should be kept relatively small and irregular in shape to maintain the visual character of the corridor.

Uneven-aged management will be used to benefit wildlife by increasing mast and browse production, improving tree species composition and diversity, and increasing vertical habitat diversity. **It will be used where cutting is planned in visually sensitive areas to provide a continuous canopy or visual variety in recreation travelways and use areas.**

Harvesting Cutting Methods

Seasonal restrictions will occur to protect or manage the featured wildlife species and/or provide non-motorized recreational opportunities.

Temporary Openings Created by the Application of Even-Aged Silviculture

Temporary openings created by even-aged management will usually not exceed 20 acres. In the following cases, the size may exceed 20 acres:

- When consistent with wildlife and recreation objectives, the size may be as large as 25 acres;
- Where larger units, not to exceed 40 acres, will produce a more desirable combination of net public benefits;
- On an individual sale basis after 60 days public notice and review by the Regional Forester;
- As a result of natural catastrophic condition, such as fire, insect and disease attack, or windstorm.

Creation and size definition of temporary openings will be governed by the wildlife management objectives.

Openings that can be seen from the river should be relatively small in size and of irregular shape, so that they blend into the landscape.

Frequency of Entry and Intensity

Timber harvesting will be necessary to achieve the wildlife management objectives. Sales will be scheduled to improve wildlife habitat, and the treatments will be based on an inventory of the existing habitat conditions. The timber harvest will vary in intensity within this management area to achieve both the wildlife and recreation management objectives.

The earliest age for regeneration cutting by timber type and management period is the following:

Timber Type	MINIMUM ROTATION		
	Management Period (Decade)		
	1-2	3	4-15
Northern Hardwoods (Beech/Hemlock) ³	120	120	120
Northern Hardwoods (miscellaneous) ⁴	90	100	120
Allegheny Hardwoods	≥80	≥100	≥100
Oak	≥80	≥100	≥120
Aspen	40	40	40
Conifers (plantations)	100	100	100

Firewood

Firewood will be available for public use only when its removal is compatible with the wildlife management objective for the stand. Only designated material may be removed for fuelwood purposes.

Pulpwood

Pulpwood on commercial timber sales will be addressed by either:

- 1) Mark or designate all merchantable products in all cut trees and require that they be paid for, cut, and removed. Undesirable saplings will be removed with KV funds, if necessary, to meet the cutting prescription.
- 2) Mark or designate all merchantable products in all cut trees, but make pulpwood removal optional. Cut pole timber with KV funds, if the option is not taken.

Timber Stand Improvement

The improvement of stands of timber will be based upon wildlife or recreation management objectives. For example, this technique may be utilized to increase mast production, improve species composition and diversity, alter vertical stand structure, or improve visual quality. This activity may be conducted non-commercially or commercially.

Reforestation

Reforest all areas which receive a final harvest cut except where the objective is to create a permanent opening.

³ Stands composed of a plurality of beech/hemlock basal area.

⁴ Stands not comprised of a plurality of beech/hemlock.

RIPARIAN AREA MANAGEMENT

Riparian area management includes the riparian zone and the riparian zone of influence (see Figure A, page 10 of the Draft Management Plan).

Perennial Streams

Along perennial streams, streamside management zones would be established to meet fisheries and wildlife management objectives. The distances, listed in Table III-1, are for each side of a stream, and could be located within a wider riparian area.

Table III-1. Streamside Management Zone Distances.

<u>STREAM WIDTH (bankfull)</u>	<u>STREAMSIDE MANAGEMENT ZONE</u>
defined stream channel-<10'	75'+2'/1% slope
>10'	100'+2'/1% slope

As stream width increases, the size of large woody debris must also increase to be effective in the formation of quality fish habitat. To provide long-term input of large woody debris to a stream, a sufficient number of trees within the streamside management zone should be allowed to grow to biological maturity. These trees, as some begin to fall naturally into streams, create habitat diversity for aquatic life. These zones do not necessarily follow riparian area boundaries and are the most effective on tributaries to the Allegheny River.

Intermittent Streams

Intermittent streams within the corridor should be managed to:

- maintain trees that are providing streambank stability;
- maintain trees growing within a stream channel for stability purposes;
- provide for continued input of leaf litter (intermittent streams transport leaf litter by periodic flushings into downstream reaches of perennial waters, as well as provide habitat for aquatic invertebrates within these intermittent channels [Williams and Hynes 1976, Williams and Hynes 1977]); and
- continue with the current Forest Plan standard and guideline of a suggested filter strip width during timber harvesting of 50'+2'/1% slope (Forest Plan page 4-24), or the actual size of the riparian area, whichever is larger.

WILDLIFE HABITAT MANAGEMENT

- *Protect existing spring seeps and other water areas critical to wintering wildlife.
- *Provide wetland habitats to meet the requirements of management indicator species.
- *Favor selective treatment of transmission line rights-of-way vegetation to improve wildlife forage.
- *Manage permanent openings and grasslands in upland forest areas to meet needs of management indicator species.

*Provide special habitat requirements necessary to maintain viable populations of those species that require isolation.

Wildlife

Three wildlife management intensities were options within this area which varied by quantity and quality of habitat development.

- Low Intensity maintains the current investments with no new habitat development.
- Medium Intensity is mid-way between Low and High Intensity.
- High Intensity conforms with achieving the upper limit of the featured species population range. These upper limits are consistent with those specified in recent research literature, modified slightly based on our professional knowledge of local conditions.

The output objectives and the proposed and probable practice amounts are the result of the high intensity being selected.

Habitat improvement should be directed toward production of turkey, bear, cavity-nesting birds, and cavity-nesting mammals.

Specialized habitats and inclusions within the management area will receive treatments to specifically benefit small-game, non-game, indicator species, or species of special concern.

Wildlife habitat management will provide a minimum of five percent and a maximum of 10 percent in permanent openings and other types of turkey brood habitat. Most of this acreage will be comprised of shrub type openings, savannahs, and rights-of-way.

- Maintain openings less than 20 acres in size unless the percent available exceeds the maximum. Some existing fields over two acres in size may be planted with fruit-bearing trees and shrubs.
- Brood habitat for turkeys less than three weeks old can be managed in stands up to 80 acres in size. This unique habitat contains certain ground vegetation, vertical stand structure, and timber stocking densities.
- New permanent openings created will range in size from one to five acres.
- Spatial distribution should usually be 1/4 to 1/2 mile apart and should not exceed one mile.
- Openings will be seeded to non-native grasses and legumes to improve turkey habitat in selected locations; however, most openings will be managed in native grasses, forbs, and shrubs.
- Selected areas may be developed adjacent to sawtimber size coniferous cover to provide turkey wintering areas.
 - * These areas will be located at elevations less than 1,800 feet and preferably on south slopes or valley bottoms.
 - * Areas developed will range in size from 5-10 acres and should be located at one to two mile intervals adjacent to stream bottoms.
 - * Food and cover-producing trees and shrubs that have persistent fruit will be planted where necessary to complement existing food-producing species.
 - * If cover is scarce, plant two acres in conifers.
 - * Provide at least a 200-yard wide buffer zone around them where adverse human activity and forest and land management practices are regulated.
 - * Protective fencing will usually be required to protect seedlings from deer.

Manage recognized deer and turkey wintering areas to provide a sustained supply of winter thermal cover and food.

- Thermal cover will be dispersed and when vegetation composition goals are achieved, there will generally be no more than 20% of a management area in conifers. Rhododendron and mountain laurel will be provided in selected areas to provide additional thermal cover and habitat diversity.
- Seedling/sapling, pole timber, and sawtimber size classes of conifers will be provided.
- Favor hemlock and white pine where they occur.
- Manage timber stands within and adjacent to wintering areas to increase browse and mast production.

Manage habitat adjacent to selected warm-water (nontrout) streams and lakes to maintain viable populations of beaver, other furbearers, and associated aquatic species.

Provide cover/forage edge adjacent to rights-of-way.

Provide for the retention of dead and down logs and other ground material necessary to maintain viable populations of indigenous species, such as reptiles and amphibians.

Regeneration cuttings will be small and well distributed. Poletimber and sawtimber will comprise a minimum of 70 percent of the forested acreage per 5,000 acres of habitat.

Provide special habitat requirements necessary to maintain viable populations of those species requiring isolation.

Provide wetland habitat to meet the needs of selected species.

Provide three to five live trees per acre containing nesting cavities and having a minimum DBH of 14 inches for cavity-nesting birds and mammals.

Within regeneration units, mark for retention the snags and cavity nesting trees (leave or reserve trees) which would meet utilization standards under the timber sale contract.

Road construction, reconstruction, and other resource management activities that would disturb turkeys during the nesting season, April 15 to June 15, should be scheduled to avoid a conflict to the extent practicable.

Roads should be located to avoid turkey brood habitat, as well as turkey and deer wintering areas.

Local roads may be open to hunters during the antlerless deer season, flintlock muzzleloader, and late archery seasons if overbrowsing is occurring and the road conditions are suitable.

Local roads will be closed to meet the Pennsylvania Fish and Boat Commission guideline for Wilderness Trout Stream management, i.e., stream must not be accessible to motorized vehicles at more than one point every two miles or can be limited to at most one point every two miles. Refer to the 2600 section of the Forest-wide standards and guidelines for the current listing of these streams.

Roads and trails should be located in a manner to avoid turkey brood habitat and both turkey and deer wintering areas.

*Fish

*Fish passage in streams should not be blocked or prevented, unless done in conjunction with prescribed fish management.

SPECIAL USES

*Utility Transmission Corridors

*NOTE: See also Transportation System, Corridors.

*Permit those facilities that are required to serve recreational or administrative facilities. Exceptions will be considered on an individual basis.

*Utility Distribution System

*Approval of application for distribution systems crossing National Forest System lands (such as utility rights-of-way serving individual residences) will be determined individually, consistent with the standards and guidelines.

MINERALS AND GEOLOGY

Private Minerals

Special emphasis will be given to identifying and implementing measures to reduce adverse impacts on the resource objectives of this Management Area. Mitigation measures may include gating roads, vegetative screening of facilities, and wildlife habitat improvement projects. Implementation of these measures will be negotiated with the oil/gas developers.

FIRE MANAGEMENT

*Prescribed fire may be used to establish or maintain vegetation for wildlife.

*Activity fuels will be managed at a level commensurate with the allowable fire intensity and rate of spread that meets resource objectives in established prescriptions. Treatment along highways and adjacent properties will meet applicable state laws.

LAND OWNERSHIP

*Surface Ownership

*Avoid encumbering land available for exchange with land uses that compromise land exchange opportunities.

BUILDINGS AND STRUCTURES

*Buildings and structures may be provided to support resource management objectives.

PUBLIC HEALTH AND POLLUTION CONTROL ACTIVITIES

Water Supply

*Drinking water may be provided. If provided, it must meet Federal and State regulations and be protected to ensure its continued quality.

Water systems may include springs or hand pumps.

*Solid Waste

*Emphasize and promote use of the carry-in/carry-out method of disposal. Landfill disposal sites will not be provided unless other more compatible alternatives are exhausted including private land.

Effluents

Sewage systems include vault toilets only.

TRANSPORTATION SYSTEM

*Collectors and local roads will be designed, constructed, and managed for transporting forest products and supporting administrative use.

*Roads may be closed to public use or restricted by vehicle type or season of use.

*Roads will be maintained to at least maintenance level III if passenger car travel is intended, maintenance level II if passage of vehicles is limited, or maintenance level I if closed to vehicular traffic.

*All temporary and short-term roads will be planned and constructed to be revegetated. Revegetation will be accomplished in a reasonable period of time.

*Identify all existing roads and determine those needed for administrative and public use. Unnecessary roads will be obliterated.

Roads leading to and within small-scale developed recreation areas will be designed and maintained to a standard applicable to the site.

Forest Service road density will range from one to three miles per square mile in this management area.

Local roads will be Traffic Service Level (TSL) "D". These local roads will be closed to public traffic.

New road construction in this management area will be restricted to TSL "D". Existing roads may be reconstructed, but to no higher a standard than TSL "D". -

ORV use will not be designated on existing roads within Minister Valley (Management Area 6.1 north of State Route 666) or Clarion River (Management Area 6.1 east of powerline near Portland Mills and south of Township Road 307 and LR 24002) areas. No new road construction will occur in these areas either.

MANAGEMENT AREA 6.4

DESCRIPTION FOR MANAGEMENT AREA 6.4

This management area of approximately 23,100 acres was established through the Pennsylvania Wilderness Act of 1984. It contains portions of Cornplanter, Tracy Ridge, and Allegheny Front RARE II inventory areas as well as the section of the Allegheny Reservoir between Cornplanter and Tracy Ridge.

The emphasis in this area is to provide a land condition with vegetation generally progressing through the natural succession process to mature or overmature hardwood forest.

The primary purpose is to:

- Preserve and protect the natural scenic, scientific, historic, archaeological, ecological, educational, watershed, and wildlife values.
- Provide for enhancement of dispersed semi-primitive motorized and non-motorized recreation opportunities.

As these areas will have only a limited amount of vegetative management activities designed to enhance wildlife habitat or to achieve recreation objectives, the Forest will generally progress through natural succession to a mature northern hardwood type. Scattered herbaceous, shrub, and conifer inclusions may be evident due to maintenance of wildlife habitat.

Some abandoned roads and facilities are still evident from early oil and gas and logging production; i.e., old roads, railroad grades, pipelines, oil well sites, power houses, rodlines, and cleared rights-of-way. The area will continue to slowly revert to a natural Forest condition.

State, township, and Forest Service administered arterial and collector roads may form, or be adjacent to, but not within, the boundary of this management area. All other roads will be closed except for roads serving developed recreation sites.

Recreational facilities will generally be limited to those necessary to provide access into the area or protect the resources, such as trails, trailhead facilities, and primitive campsites, vault toilets, and spring or hand pump water systems.

Utility corridors and development of oil and gas fields may be evident within the area.

Seasonal wildlife habitat improvement and maintenance work may include such activities as food plot maintenance, shrub and conifer planting, and timber thinning. Trail construction and maintenance will occasionally be evident. Administrative and law enforcement activities will occur.

Specialized habitats and inclusions within the management area will receive treatments to specifically benefit small-game, non-game, indicator species, or species of special concern.

Recreational opportunities will include dispersed activities, such as cross-country skiing, backpacking, hiking, fishing, hunting, trapping, motor boating, camping, and water skiing.

STANDARDS AND GUIDELINES FOR MANAGEMENT AREA 6.4

ALLEGHENY NATIONAL RECREATION AREA

HUMAN AND COMMUNITY DEVELOPMENT

Volunteers and personnel from other programs hosted by the Forest Service could be used to accomplish needed work within the river corridor. Encourage participation in the Pennsylvania Fish and Boat Commission's "Adopt-a-Stream" program and the DER Water Monitoring Program.

Provide technical assistance as requested to landowners desiring to implement corridor guides.

INFORMATION SERVICES

The information services provided for the Allegheny Wild and Scenic River are intended to satisfy the three information needs of users of the Allegheny River corridor. These needs are: directional, behavioral, and interpretive. The services will inform river users of recreational opportunities and laws and regulations pertaining to specific activities. Information will be provided through a variety of media, including but not limited to signs, brochures, personal contacts, and news media.

- Develop a sign plan for the river corridor including inventory of existing signs, analysis of needs and standards of future signing .*
- Provide signing on the river to enable river users to locate and land safely at the public access sites.*
- Through signing, brochures, and maps provide distances between various river features and access sites for convenience and safety of river users.*
- All informational signing within the river corridor on National Forest will be uniform in color and design as provided in the Forest Service Sign Handbook and River Sign Plan (To be developed). Signing along roads, trails and within recreation sites should be simple, easily read and organized.*
- An information system using a variety of media should be developed for river users that will identify public lands, recreation opportunities, public facilities, landmarks on the river, trail opportunities, regulations, safety messages, and special features/points of interest.*
- All information media should emphasize "Leave No Trace or Pack-in Pack-out", respect private property rights , and water safety throughout the corridor.*
- Information and Interpretive media will be coordinated with the local agencies, Chambers of Commerce, Tourist Promotion Agencies, Oil Region Heritage Park, State agencies etc. to assure accuracy and eliminate redundancy.*
- Design an Allegheny River brochure that lists the three classifications of Wild and Scenic Rivers, and explains that the Allegheny has a "recreational" classification, identifies the values that made the river worthy of being a National Wild and Scenic River, tells why it needs to be protected and what the user can do to protect it, and includes information on sensitive, threatened and endangered species.*
- The Forest Service and the Pennsylvania Department of Environmental Resources will cooperate with and encourage riparian landowner organizations, local Chambers of Commerce, local governments, trail organizations, organized fishing groups, outfitters and guides, commercial establishments etc., to develop appropriate means of meeting the river users' recreational and informational needs.*

- *The Forest Service will cooperate with the Oil Region Heritage Park and others to develop an interpretation plan for the river that will be consistent throughout it's length. Interpretive information may include such themes as the riverine ecosystem, the outstanding remarkable values, cultural history, or the Allegheny Islands Wilderness.*

(On private land, it is recommended that signs should at least compliment the color and basic design of those on National Forest and carry the Wild and Scenic River logo.)

LAND AND RESOURCE MANAGEMENT PLANNING

Vegetative Management

Vegetative management shall be done only to maintain or enhance existing recreation, wildlife, or watershed values, except to facilitate private mineral resource exploration and development.

RECREATION MANAGEMENT

Opportunities

Protect and enhance the existing opportunities for semi-primitive motorized and non-motorized recreation experiences.

Semi-primitive motorized ROS class recreation experiences will be emphasized in the NRA.

Non-motorized recreation opportunities will be emphasized on the interior of the NRA in the existing undeveloped portions.

Public motorized vehicle use will not be permitted except for motorized use on the Allegheny Reservoir and vehicles in the developed recreation areas.

Recreation Sites

With the exception of existing sites, recreation sites may be provided at development scale 3 or less. Some of the reservoir "boat-to" campgrounds are within this management goal. Generally these sites will have less than 50 campsites, with vault toilets, carry-in and carry-out garbage policy, and hand pump water supplies.

Maintenance of sites will follow guidelines contained in FSM 2330, referenced handbooks, and ED&T #9099 titled "Cleaning Recreation Sites." Sites may be closed for economic or safety reasons.

Where possible, developed recreation facilities (permanent campgrounds, etc.) should be limited to those general areas where they already occur and should not be planned in the more remote and wild areas.

Emphasize a "Leave No Trace" policy where users are required to haul away their own trash and leave no trace of their visit.

*Location of recreational developments will be determined with priority given to correcting health and safety problems, protecting the environment, complementing prescribed recreation opportunities, and meeting public demand.

Trails

*Trail management will be compatible with the ROS objectives.

Trail types appropriate to this management area are:

Pedestrian Summer
Equestrian Summer
Pedestrian Winter

The choice of which type to be constructed will be based on analysis of demand, existing supply (both public and private), suitable locations, plans of other agencies, and plans of private sector at the time of implementation.

Trails may include all three difficulty classes of Easiest, More, and Most Difficult to provided a full range of experiences.

Interpretation

At trailheads into the management area, personal contact, brochure racks, and bulletin boards will be utilized to interpret the environment and inform users about proper use of the area.

Off-Road Vehicles (ORV)

*Use of motorized vehicles off roads will not be permitted in the NRA. Exceptions include use of administrative vehicles, emergency vehicles, use authorized by permit or contract (relating to outstanding private OGM rights).

*Cultural Resources

*Priorities will be set for evaluation of cultural resources for the National Register of Historic Places.

*Assess the nature and degree of damage to cultural resources caused by vandalism, visitor use, and natural deterioration and identify protective measures to be implemented.

*Interpretation of cultural resources should be compatible with the natural character and recreation opportunities of this area.

Visual Quality

-

Management activities should meet the Visual Quality Objectives (VQO) displayed in the chart below by sensitivity levels, distance zones, and variety classes.

VARIETY CLASS	SENSITIVITY LEVEL & DISTANCE ZONE						
	FG1	MG1	BG1	FG2	MG2	BG2	3
Class A	R	R	R	R	R	PR	PR
Class B	R	PR	PR	PR	PR	M	M
Class C	PR	PR	PR	PR	M	M	M

Visual Quality Objectives - (R) Retention, (PR) Partial Retention, (M) Modification, (MM) Maximum Modification
Variety Class - (A) Distinction, (B) Common, (C) Minimal Visual Distance Zone - (FG) Foreground, (MG) Middleground, (BG) Background Sensitivity Level - (1) Most Sensitive, (2) Sensitive, (3) Least Sensitive

Vegetation will be allowed to evolve naturally within the forested riparian buffer, unless restoration work is necessary. Restoration work will use native plants. Maintain or enhance the streambank vegetation that provides screening of man-made facilities and activities.

*Maintain or enhance the integrity of the Landscape Types 1 - 3 (see pages **-**) by allowing changes consistent with the future condition descriptions (see pages **-**).*

Landscapes within the corridor will be managed under the visual quality objective of Retention which recommends that management activities not be visually evident to the average visitor. Any management activity or development should be designed to blend with the form, line, color and texture of the natural surroundings.

TIMBER MANAGEMENT

Silvicultural Systems

Timber will be harvested only to achieve wildlife and recreation management objectives.

Uneven-aged management or salvage may be an option used to maintain browse and mast production around existing habitat improvements to maintain continuous canopy in visually sensitive areas, or to provide visual variety in recreation travelways or use areas.

Even-aged management may be an option for creating or maintaining permanent openings for wildlife; for increasing visual variety; and providing viewpoints for recreationists.

When even-aged management is used, openings should be relatively small and irregular in shape so that treatments blend in with the landscape.

*Temporary Openings Created by the Application of Even-aged Silviculture

Temporary openings created by even-aged management will generally not exceed ten acres, except as provided below:

- On an individual sale basis after 60 days public notice and review by the Regional Forester
- As a result of natural catastrophic condition, such as fire, insect and disease attack, or windstorm.

Openings that can be seen from the river should be relatively small in size and of irregular shape, so that they blend into the landscape.

Frequency of Entry and Intensity

A limited amount of commercial timber sales may be necessary to achieve wildlife management objectives.

Timber harvest is unscheduled and will vary in intensity.

Firewood

Firewood may be gathered for use within the NRA boundary. If significant resource damage is expected, gathering may be restricted by Forest Supervisor order.

Reforestation

Reforestation will be done to meet wildlife and recreation objectives.

WATER AND SOIL RESOURCE MANAGEMENT

Riparian Area Management

Riparian areas will be managed to emphasize riparian dependent resources which contribute to the objectives of this management area. Such resources include wildlife habitat; fish habitat in the Allegheny River, Allegheny Reservoir, and streams; and dispersed recreation opportunities. Appropriate activities in riparian areas may include wildlife and fish habitat improvement, and trail construction.

Public use of specific areas may be limited to protect water quality.

Trails will be located to protect soil and water quality values.

Riparian area management includes the riparian zone and the riparian zone of influence (see Figure A, page 10 of the Draft Management plan).

1) Perennial Streams

Along perennial streams, streamside management zones would be established to meet fisheries and wildlife management objectives. The distances, listed in Table III-1, are for each side of a stream, and could be located within a wider riparian area.

Table III-1. Streamside Management Zone Distances.

<u>STREAM WIDTH (bankfull)</u>	<u>STREAMSIDE MANAGEMENT ZONE</u>
defined stream channel-<10'	75'+2'/1% slope
>10'	100'+2'/1% slope

As stream width increases, the size of large woody debris must also increase to be effective in the formation of quality fish habitat. To provide long-term input of large woody debris to a stream, a sufficient number of trees within the streamside management zone should be allowed to grow to biological maturity. These trees, as some begin to fall naturally into streams, create habitat diversity for aquatic life. These zones do not necessarily follow riparian area boundaries and are the most effect effective on tributaries to the Allegheny River.

2) Intermittent Streams

Intermittent streams within the corridor should be managed to:

- *maintain trees that are providing streambank stability;*
- *maintain trees growing within a stream channel for stability purposes;*
- *provide for continued input of leaf litter (intermittent streams transport leaf litter by periodic flushings into downstream reaches of perennial waters, as well as provide habitat for aquatic invertebrates within these intermittent channels [Williams and Hynes 1976, Williams and Hynes 1977]); and*
- *continue with the current Forest Plan standard and guideline of a suggested filter strip width during timber harvesting of 50'+2'/1% slope (Forest Plan page 4-24), or the actual size of the riparian area, whichever is larger.*

WILDLIFE HABITAT MANAGEMENT

*Provide wetland habitats to meet the requirements of management indicator species.

*Provide special habitat requirements necessary to maintain viable populations of those species that require isolation.

*Favor selective treatment of transmission line rights-of-way vegetation to improve wildlife forage.

Specialized habitats and inclusions within the management area will receive treatments to specifically benefit small-game, non-game, indicator species, or species of special concern.

Maintain or enhance existing permanent openings and grasslands in upland forest areas to meet wildlife needs.

Openings may be planted with fruit producing trees and shrubs, although most will be managed in native grasses, forbs, and shrubs.

Protect and enhance spring seeps and other water areas including the adjacent vegetation that are critical to wildlife.

SPECIAL USES MANAGEMENT

*Utility Transmission Corridors

*Permit only those facilities that are required to serve recreational or administrative needs. Exceptions will be considered on an individual basis.

*Utility Distribution Systems

*Approval of application for distribution systems crossing National Forest System lands (such as utility rights-of-way serving individual residences) will be determined individually, consistent with the standards and guidelines.

MINERALS AND GEOLOGY

Federal Minerals

Federally owned oil, gas, and other minerals within the NRA have been congressionally withdrawn from leasing consideration. Rock sources within the NRA will not be used or developed.

Private Minerals

The goal of Forest Service administration of private mineral development is to reduce the impacts of development on visual quality, recreation opportunities, watershed values, and wildlife habitat, while honoring private rights.

At least 60 days in advance of proposed development, the developer will provide the Forest Service with a Plan of Operations. The Plan of Operations must be approved by the Forest Service before any surface disturbing activities begin. In addition to those items specified in the forest-wide standards and guidelines, the Plan will address the following:

Schedule of Activities and Staging of Operations

The staging of well construction will be provided in the Plan of Operations. At any one time, no more than five well sites and accompanying access roads will be cleared in advance of actual drilling operations. Each five-well package will be handled as a single timber sale payment unit.

In the vicinity of developed recreation sites or areas receiving heavy recreation use, the Forest Service may impose restriction on the hours, days, or season of operation in order to reduce impacts on recreationists.

Water for hydrofracturing will be stored in tanks.

Production and Collection Facilities

Visual impacts of facilities will be reduced to the extent possible by siting, vegetative screening, or other methods. All above-ground facilities will be painted with earth-tone colors. Construction materials will meet visual quality requirements.

Tank batteries will be located outside the NRA where possible. Tanks and separators will be located on one site in the development. Tank hatches will be locked.

Where possible, all utility and collection lines will be buried at a minimum depth of three feet and marked with Terra tape or its equivalent. Surface lines may be permitted if boulders, topography, or other conditions make burial impractical or infeasible. Lines will be located in road rights-of-way. Lines may be located outside of rights-of-way if new corridor clearing is required for their installation.

Pump jacks will be powered by electric motors and signed to warn the public of automatic operation. Gasoline powered motors may be used, in limited cases, if environmentally preferred.

Natural gas that is not utilized on the development or marketed will be flared.

Methods for Waste Disposal

All produced water will be contained in tanks and disposed of outside the NRA by state-approved methods.

Stumps will be buried in an approved location or removed from the NRA. Slash will be lopped to within three feet of the ground and scattered.

Excess or unused materials, litter, and trash will be promptly removed from the development and disposed of properly.

Surface Restoration Plan

The goal of surface restoration is to restore the natural landform and facilitate the establishment of forest vegetation.

A bond to guarantee stabilization and final restoration of disturbed areas will be required on all developments.

Restoration plans will include removal of all equipment and facilities, recontouring of roads and well sites, and revegetating all disturbed areas. In order to restore forest vegetation, methods such as scarification, fertilizing, mulching, liming, direct seeding, or planting shrubs and trees may be necessary. Native plant species will be used when seed or planting stock is available.

Any equipment or facility not used for a period of one year must be removed by the operator within 90 days of notification.

FIRE MANAGEMENT

*Activity fuels will be managed at a level commensurate with the allowable fire intensity and rate of spread that meets resource objectives in established prescriptions.

Treatment along highways and adjacent properties will meet applicable state laws.

LAND OWNERSHIP

Surface Ownership

Land within the National Recreation Area is not available for exchange.

BUILDINGS AND STRUCTURES

*Buildings and structures may be provided to support resource management objectives.

PUBLIC HEALTH AND POLLUTION CONTROL ACTIVITIES

Water Supply

*Drinking water may be provided. If provided, it must meet Federal and State regulations and be protected to ensure its continued quality.

Water systems may include springs or hand pumps.

Effluents

Sewage systems include vault toilets only.

Solid Waste

*Landfill disposal sites will not be provided.

TRANSPORTATION SYSTEM

*Identify all existing roads and determine those needed for administrative and public use. Unnecessary roads will be closed.

State, township, and Forest Service administered arterial and collector roads may form, or be adjacent to, but not within, the boundary of these areas, except for those needed to satisfy private legal rights.

Existing local roads will be managed as Traffic Service Level "D". These local roads will be closed to public traffic with the following exception:

- Roads leading to and within developed recreation areas will be designed and managed to a Traffic Service Level applicable to the site.

MANAGEMENT AREA 7

DESCRIPTION FOR MANAGEMENT AREA 7

The emphasis in this area is to provide high-density, destination-type recreation developments within a forest environment.

The primary purpose is to:

- Provide high-density, self-contained forest recreation developments in a rural setting.
- Vegetation management will ensure that the long-term viability, safety, and attractiveness of the area will continue throughout the anticipated life of the development.

Vegetation will be intensively managed to provide an attractive setting for the intended use, and it will generally consist of native species.

Facilities for motorized use and parking will be available. Facilities will be designed for use by a large number of people and will be provided for special activities. Away from the developed sites, facilities will accommodate moderate user density.

Facilities, structures, and utilities will be very evident, but will be designed to be compatible with the values that make the area attractive to the users. Oil and gas development will not generally occur within these highly developed sites.

State, township, and Forest Service administered arterial and collector roads may be located within this management area. Forest Service local roads will be Traffic Service Level (TSL) "A to C" and will be open to all public traffic except for certain seasonal restrictions for recreation purposes.

Large numbers of users will be present, human sights and sounds readily evident, and the interaction between users will be moderate to high. Resource modification and utilization practices will be primarily to enhance specific recreational activities, to maintain vegetative cover and to stabilize soil.

This goal may have activities and facilities such as auto camping, swimming, motor boating, picnicking, lodges, and food services.

STANDARDS AND GUIDELINES FOR MANAGEMENT AREA 7

HUMAN AND COMMUNITY DEVELOPMENT

Volunteers and personnel from other programs hosted by the Forest Service could be used to accomplish needed work within the river corridor. Encourage participation in the Pennsylvania Fish and Boat Commission's "Adopt-a-Stream" program and the DER Water Monitoring Program.

Provide technical assistance as requested to landowners desiring to implement corridor guides.

INFORMATION SERVICES

The information services provided for the Allegheny Wild and Scenic River are intended to satisfy the three information needs of users of the Allegheny River corridor. These needs are: directional, behavioral, and interpretive. The services will inform river users of recreational opportunities and laws and regulations pertaining to specific activities. Information will be provided through a variety of media, including but not limited to signs, brochures, personal contacts, and news media.

- Develop a sign plan for the river corridor including inventory of existing signs, analysis of needs and standards of future signing .*
- Provide signing at access sites that informs users of the site location within the corridor, river regulations including water safety, emergency services, special interpretive features, and activities available in the area .*
- Provide signing on the river to enable river users to locate and land safely at the public access sites.*
- Through signing, brochures, and maps provide distances between various river features and access sites for convenience and safety of river users.*
- All informational signing within the river corridor on National Forest will be uniform in color and design as provided in the Forest Service Sign Handbook and River Sign Plan (To be*

developed). Signing along roads, trails and within recreation sites should be simple, easily read and organized.

- An information system using a variety of media should be developed for river users that will identify public lands, recreation opportunities, public facilities, landmarks on the river, trail opportunities, regulations, safety messages, and special features/points of interest.*
- All information media should emphasize "Leave No Trace or Pack-in Pack-out", respect private property rights , and water safety throughout the corridor.*
- Information and Interpretive media will be coordinated with the local agencies, Chambers of Commerce, Tourist Promotion Agencies, Oil Region Heritage Park, State agencies etc. to assure accuracy and eliminate redundancy.*
- Design an Allegheny River brochure that lists the three classifications of Wild and Scenic Rivers, and explains that the Allegheny has a "recreational" classification, identifies the values that made the river worthy of being a National Wild and Scenic River, tells why it needs to be protected and what the user can do to protect it, and includes information on sensitive, threatened and endangered species.*
- The Forest Service and the Pennsylvania Department of Environmental Resources will cooperate with and encourage riparian landowner organizations, local Chambers of Commerce, local governments, trail*

organizations, organized fishing groups, outfitters and guides, commercial establishments etc., to develop appropriate means of meeting the river users' recreational and informational needs.

- The Forest Service will cooperate with the Oil Region Heritage Park and others to develop an interpretation plan for the river that will be consistent throughout its length. Interpretive information may include such themes as the riverine ecosystem, the outstanding remarkable values, cultural history, or the Allegheny Islands Wilderness.

(It is recommended that on private land, signs should at least compliment the color and basic design of those on National Forest and carry the Wild and Scenic River logo.)

RECREATION MANAGEMENT

Opportunities

*Location of recreational developments will be determined with priority given to correcting health and safety problems, protecting the environment, complementing prescribed recreation opportunities, and meeting public demand.

*Feature Rural ROS class recreation opportunities.

Recreation Sites

Construction of new sites will occur at development scale 4 or 5. Sites will be larger than 50 campsites or 250 PAOT. The sites will usually have pressure water systems, sewage treatment plants, hot showers, paved service roads, and outdoor lighting.

All structures and facilities will be designed and located to maintain a natural or rustic appearance.

Structures will not be more than two stories high.

Natural building materials, such as stone and wood, will be used on the exterior of all structures.

Earth-tone colors will be used for all exterior finishes.

The visual quality objectives will be met primarily through vegetative screening of structures seen from a distance.

These sites may be developed and operated by the private sector under permit to the U. S. Government.

Emphasize a "Leave No Trace Policy" where users are required to haul away their own trash and leave no trace of their visit.

Trails

*Trail management will be compatible with the ROS objective.

Trail types appropriate for this management area are:

- Motorized Summer
- Pedestrian Summer
- Equestrian Summer
- Motorized Winter
- Pedestrian Winter

The choice of trails to be constructed will be based on analysis of demand, existing supply (both public and private), suitable locations, plans of other agencies and plans of private sector at the time of implementation.

Trails may include two difficulty classes of Easiest, and More Difficult to provide a range of experiences within the Rural ROS class.

Interpretation

In this area, manned interpretive and information facilities may be utilized to inform and educate Forest visitors.

Visual Quality

Management activities should meet the Visual Quality Objectives (VQO) displayed in the chart below by sensitivity levels, distance zones, and variety classes.

VARIETY	SENSITIVITY LEVEL & DISTANCE ZONE						
<u>CLASS</u>	<u>FG1</u>	<u>MG1</u>	<u>BG1</u>	<u>FG2</u>	<u>MG2</u>	<u>BG2</u>	<u>3</u>
Class A	R	PR	PR	PR	M	M	M
Class B	PR	M	M	PR	M	MM	M
Class C	PR	M	M	M	MM	MM	MM

Visual Quality Objectives - (R) Retention, (PR) Partial Retention, (M) Modification, (MM) Maximum Modification
Variety Class - (A) Distinction, (B) Common, (C) Minimal Visual Distance Zone - (FG) Foreground, (MG) Middleground, (BG) Background Sensitivity Level - (1) Most Sensitive, (2) Sensitive, (3) Least Sensitive.

Vegetation will be allowed to evolve naturally within the forested riparian buffer, unless restoration work is necessary. Restoration work will use native plants. Maintain or enhance the streambank vegetation that provides screening of man-made facilities and activities.

*Maintain or enhance the integrity of the Landscape Types 1 - 3 (see pages **-**) by allowing changes consistent with the future condition descriptions (see pages **-**).*

Landscapes within the corridor will be managed under the visual quality objective of Retention which recommends that management activities not be visually evident to the average visitor. Any management activity or development should be designed to blend with the form, line, color and texture of the natural surroundings.

Cultural Resources

*Priorities will be set for evaluation of cultural resources for the National Register of Historic Places.

*Assess the nature and degree of damage to cultural resources caused by vandalism, visitor use, and natural deterioration and identify protective measures to be implemented.

*Emphasize development and interpretation of significant cultural resources to enhance recreation opportunities.

Interpretation may occur during the evaluation or the excavation of major sites, and the excavation may be featured as well as the findings of the evaluation or excavation.

TIMBER MANAGEMENT

Silvicultural Systems

Timber will be managed for visual, recreational, and safety purposes in the developed area. Single tree selection and group selection will be emphasized.

Salvage of timber products may occur in developed areas.

Whole tree removal will be emphasized in developed areas.

A vegetative management plan should be developed for each area and address the size of temporary openings.

Timber harvest is unscheduled.

Harvesting may be restricted to periods of low recreation use to minimize user conflict.

Firewood

Fuelwood may be made available for public use.

Pulpwood

Mark or designate all merchantable products in all cut trees and require that they be paid for, cut, and removed. Undesirable saplings will be removed with KV funds, if necessary, to meet the cutting prescription.

Reforestation and Timber Stand Improvement

These activities will usually not occur except when necessary to achieve the management objectives of the area or to protect adjacent land owners from fire or pests.

WATER AND SOIL RESOURCE MANAGEMENT

Intensive structural and nonstructural practices for erosion control should be used as necessary to prevent soil loss and water quality degradation in areas receiving heavy recreation use. Practices may include paving, terracing, gabion installation, rip-rapping, etc.

Riparian Area Management

Riparian area management includes the riparian zone and the riparian zone of influence (see Figure A, page 10 of the Draft Management Plan).

1) *Perennial Streams*

Along perennial streams, streamside management zones would be established to meet fisheries and wildlife management objectives. The distances, listed in Table III-1, are for each side of a stream, and could be located within a wider riparian area.

Table III-1. Streamside Management Zone Distances.

<u>STREAM WIDTH (bankfull)</u>	<u>STREAMSIDE MANAGEMENT ZONE</u>
<i>defined stream channel-<10'</i>	<i>75'+2'/1% slope</i>
<i>>10'</i>	<i>100'+2'/1% slope</i>

As stream width increases, the size of large woody debris must also increase to be effective in the formation of quality fish habitat. To provide long-term input of large woody debris to a stream, a sufficient number of trees within the streamside management zone should be allowed to grow to biological maturity. These trees, as some begin to fall naturally into streams, create habitat diversity for aquatic life. These zones do not necessarily follow riparian area boundaries and are the most effective on tributaries to the Allegheny River.

2) Intermittent Streams

Intermittent streams within the corridor should be managed to:

- *maintain trees that are providing streambank stability;*
- *maintain trees growing within a stream channel for stability purposes;*
- *provide for continued input of leaf litter (intermittent streams transport leaf litter by periodic flushings into downstream reaches of perennial waters, as well as provide habitat for aquatic invertebrates within these intermittent channels [Williams and Hynes 1976, Williams and Hynes 1977]); and*
- *continue with the current Forest Plan standard and guideline of a suggested filter strip width during timber harvesting of 50'+2'/1% slope (Forest Plan page 4-24), or the actual size of the riparian area, whichever is larger.*

WILDLIFE HABITAT MANAGEMENT

Wildlife

*Favor selective treatment of transmission line rights-of-way vegetation to improve wildlife forage.

*Manage wildlife habitat to enhance visitor enjoyment.

Nest boxes for cavity-nesting bird species and squirrels may be provided.

Provide special viewing structures or interpretative trails when appropriate to enhance visitor enjoyment.

Specialized habitats and inclusions within the management area will receive treatments to specifically benefit small-game, non-game, indicator species, or species of special concern.

SPECIAL USES MANAGEMENT

*Utility Transmission Corridors

*NOTE: See also Transportation System, Corridors.

*Permit only those facilities that are required to serve recreational or administrative needs. Exceptions will be considered on an individual basis.

*Utility Distribution System

*Approval of application for distribution systems crossing National Forest System lands (such as utility rights-of-way serving individual residences) will be determined individually, consistent with the standards and guidelines.

MINERALS AND DEVELOPMENT

*Federal Minerals

Surface disturbing mineral development is generally not compatible with the resource objectives of this management area. This compatibility determination, however, will be based on a site specific analysis of each tract.

Private Minerals

Special emphasis will be given to identifying and implementing measures to reduce adverse impacts on the resource objectives of this Management Area. Implementation of these measures will be negotiated with the oil/gas developers. Mitigation measures may include:

- Location of support facilities such as tank batteries, separators, pipe yards, etc., outside management area.
- Use of techniques and equipment that can be put underground such as downhole pumping and buried utility lines and pipelines.
- Vegetative screening of well locations and roads and noise control measures.
- Removal of brine water from the management area.
- Removal of all unused equipment.

FIRE MANAGEMENT

*Activity fuels will be managed at a level commensurate with the allowable fire intensity and rate of spread that meets resource objectives in established prescriptions. Treatment along highways and adjacent properties will meet applicable State laws.

LAND OWNERSHIP

Subsurface

Acquire or subordinate private subsurface interests in developed recreation sites where necessary to protect recreation values.

BUILDINGS AND STRUCTURES

Buildings and structures may be provided to support resource management objectives.

PUBLIC HEALTH AND POLLUTION CONTROL FACILITIES

Water Supply

*Drinking water may be provided. If provided, it must meet Federal and State regulations and be protected to ensure its continued quality.

Water systems may include springs, hand pumps, or electric pumps.

Effluents

Sewage Systems may include vault toilets, but will usually be flush systems and sewage treatments plants.

*Solid Waste

*Landfill disposal sites will not be provided.

TRANSPORTATION SYSTEM

Roads

*Arterial roads, at a minimum, will be designed and constructed for transporting forest products and accommodating planned motorized recreation use, will be open and will be maintained to maintenance level III or higher.

*Local roads will be designed and constructed to be suitable for accommodating intensive recreation use and associated service vehicles.

*Roads may be closed to public vehicle use or restricted by vehicle type or season of use.

*Roads will be maintained to at least maintenance level III if passenger car travel is intended, maintenance level II if passage of vehicles is limited, or maintenance level I if closed to vehicular traffic.

*All temporary and short-term roads will be planned and constructed to be revegetated. Revegetation will be accomplished in a reasonable period of time.

*Identify all existing roads and determine those needed for administrative and public use. Unnecessary roads will be closed.

The local road standards applicable to this management prescription will be developed during the site design process.

Forest Service Local roads will be Traffic Service Level (TSL) "A to C" and will be open to all public traffic except for certain seasonal restrictions for recreation purposes.

MANAGEMENT AREA 8

DESCRIPTION FOR MANAGEMENT AREA 8

The emphasis in this management area is management of four special areas on the Forest: Tionesta Scenic Area (2,018 acres), Tionesta Research Natural Area (2,113 acres), Hearts Content Scenic Area (122 acres), Kane Experimental Forest (1,650 acres), and Buckaloons Historic District (300). Except for the scenic areas and Buckaloons Historic District, the activities are administered by the Northeastern Forest Experiment Station.

The primary purpose for Hearts Content Scenic Area and Tionesta Scenic Area is to:

- Protect the unique areas of national significance and provide dispersed recreation opportunities that emphasize the area's uniqueness
- Preserve the unique ecosystems for scientific purposes.

The primary purpose for Tionesta Research Natural Area is to:

- Preserve the unique ecosystem for scientific purposes.

The primary purpose for Kane Experimental Forest is to:

- Provide an area where we will conduct research to improve the benefits of forests.

The areas encompass many vegetative types from open fields to virgin timber stands.

State, township, and Forest Service administered arterial and collector roads may be located within this management area. Forest Service local roads, Traffic Service Level (TSL) "C & D", will be closed to all public traffic except for certain exceptions for recreation purposes.

Recreational facilities and structures may be present but generally designed to be compatible with the natural surroundings. Facilities could range from primitive structures to highly developed sites, except in the Kane Experimental Forest and Tionesta Research Natural Area where none will exist.

Recreation and use will vary, from substantially unnoticeable to very evident. Evidence of human activities will vary depending on the area's purpose, but activity generally will be controlled to reduce adverse impacts on the sites.

Administrative activities could include timber, wildlife, and recreation management functions. The unique characteristics of these areas require that they be protected by law or administrative order. Law enforcement and associated administrative activities may be common within the areas.

STANDARDS AND GUIDELINES FOR MANAGEMENT AREA 8

Management Area 8 consists of two subgroups, each composed of several areas with similar objectives, management activities, and outputs. Scenic Areas form one subgroup and Research Areas the second subgroup. There are separate standards and guidelines for each subgroup.

HEARTS CONTENT AND TIONESTA SCENIC AREAS

LAND AND RESOURCE MANAGEMENT PLANNING

Vegetative Management

Protect and preserve to extent possible the natural condition of the virgin forest that now exists.

RECREATION MANAGEMENT

Opportunities

Provide opportunities for a semi-primitive motorized recreation experience.

Due to Hearts Content's small size and easy access, no overnight camping, fire, or equestrian use will be permitted.

Recreation Sites

Developed facilities may be provided to enhance public use of area or protect environmental conditions.

Day use facilities at development scale 3 or below are appropriate.

Trails

*Trails will be consistent with the special area management objectives.

Trail types appropriate to the Scenic Areas are Pedestrian Summer and Winter.

Trail difficulty level should be Easy, to provide for the widest range of users.

Off-Road Vehicles (ORV)

ORV use will not be permitted.

Cultural Resources

*Priorities will be set for evaluation of cultural resources for the National Register of Historic Places.

*Assess the nature and degree of damage to cultural resources caused by vandalism, visitor use, and natural deterioration and identify protective measures to be implemented.

*Areas having unique cultural resource values of national significance will be identified for special management, including enhancement and interpretation. Cultural resource interpretation in other special management areas will be consistent with each area's purpose.

Interpretation

Except during high use periods, nonpersonal interpretative techniques should be used such as interpretive trails, bulletin boards, brochures, and maps to explain the unique natural and cultural history of the scenic areas.

During high use periods, personal contact may be used.

Visual Quality

All activities in scenic areas should meet the visual quality objective of retention.

TIMBER MANAGEMENT

Timber is not managed for commercial purposes.

Silvicultural System

Some individual tree cutting may occur to ensure safety of visitors along trails, roads or in designated use areas. Extensive salvage may occur following significant insect or disease infestations or catastrophic event.

WATER AND SOIL RESOURCE MANAGEMENT

Riparian areas will be managed to protect the natural condition of riparian ecosystems. Creation or enhancement of riparian-dependent resources, such as wildlife and fish habitat, is generally not appropriate.

WILDLIFE MANAGEMENT

Wildlife

- *Protect existing spring seeps and other water areas that are critical to wintering wildlife.

- *Favor selective treatment of transmission line rights-of-way vegetation to improve wildlife forage.

Wildlife or fish habitat is not managed except that any threatened and endangered species habitat identified may be protected and enhanced.

Hunting and fishing is permitted under state regulations.

SPECIAL USES MANAGEMENT

*Utility Transmission Corridors

- *Permit only those facilities that are required to serve recreational or administrative needs. Exceptions will be considered on an individual basis.

*Utility Distribution Systems

- *Approval of application for distribution systems crossing National Forest System lands, such as utility rights-of-way serving individual residences, will be determined individually, consistent with the standards and guidelines for this Regional management goal.

MINERALS AND GEOLOGY

Federal Minerals

Surface disturbing mineral development is generally not compatible with the resource objectives of this management area. This compatibility determination, however, will be based on a site specific analysis of each tract.

Private Minerals

Special emphasis will be given to identifying and implementing measures to reduce adverse impacts on the resource objectives of this Management Area. Implementation of these measures will be negotiated with the oil/gas developers. Mitigation measures may include:

- Location of support facilities, such as tank batteries, separators, pipeyards, etc., outside the management area
- Use of techniques and equipment that can be put underground, such as downhole pumps, buried utility lines, and pipelines
- Vegetative screening of well locations and roads and noise control measures.
- Removal of brine water from the management area.

FIRE MANAGEMENT

*Activity fuels will be managed at a level commensurate with the allowable fire intensity and rate of spread that meets resource objectives in established prescriptions. Treatment along highways and adjacent properties will meet applicable State laws.

LAND OWNERSHIP

*Surface Ownership

*Avoid encumbering land available for exchange with land uses that compromise land exchange opportunities.

Subsurface Ownership

Acquire subsurface rights in the Tionesta Research Natural Area. Acquire subsurface rights in the Hearts Content National Landmark.

BUILDINGS AND STRUCTURES

*Buildings and structures may be provided to support resource management objectives.

PUBLIC HEALTH AND POLLUTION CONTROL ACTIVITIES

*Water Supply

*Drinking water may be provided. If provided, it must meet Federal and State regulations and be protected to ensure its continued quality.

Solid Waste

*Landfill disposal sites will not be provided.

TRANSPORTATION SYSTEM

Roads

*Roads will be maintained to at least maintenance level III if passenger car travel is intended, maintenance level II if passage of vehicles is limited, or maintenance level I if closed to vehicular traffic.

*All temporary and short-term roads will be planned and constructed to be revegetated. Revegetation will be accomplished in a reasonable period of time.

*Identify all existing roads and determine those needed for administrative and public use. Unnecessary roads will be closed.

Local roads will be Traffic Service Level (TSL) "D". These local roads will be closed to public traffic with the following exception:

- FR 133 E and FR 193.2 will be TSL "C" roads open to the public during the normal use season.

TIONESTA RESEARCH NATURAL AREA (TRNA) and KANE EXPERIMENTAL FOREST (KEF)

INFORMATION SERVICES

No effort to disseminate information. Specific inquiries will be responded to.

LAND AND RESOURCE MANAGEMENT PLANNING

Vegetative Management

Preserve the natural condition present in the Tionesta Research Natural Area and Buckaloons.

Within the KEF, vegetative management standards will be specified within each approved research project. Research projects will generally relate to forest management problems and opportunities in the northeast.

RECREATION MANAGEMENT

In the Tionesta Research Natural Area, Buckaloons and the KEF, no new recreation investments will be made. In the KEF, the existing hiking trail will be maintained.

The ROS class provided will be semi-primitive motorized. Dispersed use will be allowed in the Tionesta Research Natural Area but to protect the natural conditions, no camping or fires will be permitted.

TIMBER MANAGEMENT

In KEF, silvicultural systems and associated activities will be specified in each research project.

In TRNA , timber harvesting will not occur unless associated with development of private mineral ownership.

WATER AND SOIL RESOURCE MANAGEMENT

Riparian Area Management

Riparian areas will be managed to protect the natural condition of riparian ecosystems. Creation or enhancement of riparian-dependent resources, such as wildlife and fish habitat or recreation opportunities, is generally not appropriate.

Riparian area management includes the riparian zone and the riparian zone of influence (see Figure A, page 10 of the Draft Management Plan).

1) Perennial Streams

Along perennial streams, streamside management zones would be established to meet fisheries and wildlife management objectives. The distances, listed in Table III-1, are for each side of a stream, and could be located within a wider riparian area.

Table III-1. Streamside Management Zone Distances.

<u>STREAM WIDTH (bankfull)</u>	<u>STREAMSIDE MANAGEMENT ZONE</u>
defined stream channel-<10'	75'+2'/1% slope
>10'	100'+2'/1% slope

As stream width increases, the size of large woody debris must also increase to be effective in the formation of quality fish habitat. To provide long-term input of large woody debris to a stream, a sufficient number of trees within the streamside management zone should be allowed to grow to biological maturity. These trees, as some begin to fall naturally into streams, create habitat diversity for aquatic life. These zones do not necessarily follow riparian area boundaries and are the most effective on tributaries to the Allegheny River.

2) Intermittent Streams

Intermittent streams within the corridor should be managed to:

- maintain trees that are providing streambank stability;
- maintain trees growing within a stream channel for stability purposes;
- provide for continued input of leaf litter (intermittent streams transport leaf litter by periodic flushings into downstream reaches of perennial waters, as well as provide habitat for aquatic invertebrates within these intermittent channels [Williams and Hynes 1976, Williams and Hynes 1977]); and
- continue with the current Forest Plan standard and guideline of a suggested filter strip width during timber harvesting of 50'+2'/1% slope (Forest Plan page 4-24), or the actual size of the riparian area, whichever is larger.

WILDLIFE MANAGEMENT

In the KEF, no wildlife habitat improvements will be provided except to protect or enhance threatened and endangered species habitat.

In the TRNA and Buckaloons, there will be no wildlife habitat improvements.

MINERALS AND GEOLOGY

Federal Minerals

Surface disturbing mineral development is generally not compatible with the resource objectives of this management area. This compatibility determination, however, will be based on a site specific analysis of each tract.

Private Minerals

Special emphasis will be given to identifying and implementing measures to reduce adverse impacts on the resource objectives of this Management Area. Implementation of these measures will be negotiated with the oil/gas developers. Mitigation measures may include:

- Location of support facilities, such as tank batteries, separators, pipeyards, etc., outside the management area
- Use of techniques and equipment that can be put underground, such as downhole pumps, buried utility lines, and pipelines
- Vegetative screening of well locations and roads and noise control measures.
- Removal of brine water from the management area.

RESEARCH

The Northeastern Forest Experiment Station will be responsible for scientific use of the Tionesta Research Natural Area and Kane Experimental Forest.

FIRE MANAGEMENT

Fire suppression will recognize the natural conditions and active research projects in the area and avoid use of heavy mechanical equipment unless the size, intensity, and/or escape of fire is critical to values of MA 8 or adjacent management areas.

LAND OWNERSHIP

Subsurface

Private mineral rights should be acquired as necessary to protect research values.

Priority will be given to the Tionesta Research Natural Area.

TRANSPORTATION SYSTEM

Local roads will be Traffic Service Level "D". These local roads will be closed to public vehicles.

BUCKALOONS HISTORIC DISTRICT

LAND AND RESOURCE MANAGEMENT PLANNING

Vegetative

Plant a diversity of native warm season grasses (including the reintroduction of "Brokenstraw grass" to the area in selected locations) to prevent adverse impacts upon cultural resources and recreation.

RECREATION AND HERITAGE RESOURCE MANAGEMENT

Opportunities

Manage the area to provide the opportunity to provide opportunity for recreational activities oriented to understanding and appreciating the area for its heritage and ecological values.

Enhancing hunting opportunities (pheasants, rabbits, waterfowl) is permitted.

Trails

Manage trails within the area to provide a quality heritage experience.

Provide and maintain a variety of trail settings from primitive to developed.

Off-Road Vehicles (ORV)

ORV use will not be permitted.

Heritage Resources

Ensure that prehistoric, historic, archaeological and natural history sites and values are studied, preserved, or protected in accordance with cultural resource regulations. Provide for interpretation and enjoyment of these sites, along with provisions for developed and dispersed recreation and protection of visual quality.

Coordinate with the Carnegie Museum of Natural History, the Warren County historical Society, the Pennsylvania Historic Museum Commission, the Seneca Nation, and the Clinton E Wilder Museum to ensure protection and enhancement of the cultural values and recreational resource values of this archaeological district.

Restrict hunter conflicts with heritage resources.

Provide for safe use of the sites.

Conduct cultural resource studies and surveys which identify cultural resource values associated with this area.

Maintain and enhance cultural resource values.

Implement specific standards for site-specific management and protection of historical values of the area.

Seek protection and access to prehistoric and historic sites through available means such as scenic easements or cooperative agreements.

Interpretive

Provide interpretive services which enhance public understanding and appreciation of cultural and ecological values.

Sufficiently mark historic foundation and locations of special interest using standard signs so that users can locate and learn about the history and prehistory of the area.

Visual

Manage visual resource to enhance visual appeal and to rehabilitate historic landscapes that do not meet adopted visual quality objectives.

WILDLIFE MANAGEMENT

Manage small game habitat within adopted Visual Quality Objectives.

In the Buckaloons Historic District wildlife habitat improvements will emphasize habitat enhancement and maintenance for early successional species and wetland/riparian species. Potential projects include the establishment of native warm season grasses, mowing and/or burning of some field, cutting of some large woody vegetation to set back succession, and planting herbaceous species to enhance wetland/prairie areas for wildlife.

SPECIAL USES MANAGEMENT

Utility Transmission Corridors

Designate as an avoidance area for potential utility corridor.

TIMBER MANAGEMENT

In Buckaloons timber harvesting will only be implemented too achieve heritage resource and wildlife management objectives.

WATER AND SOIL RESOURCE MANAGEMENT

Historic landtypes and landscape will be encouraged.

Native plant material will be required for water and site restoration.

Riparian Area Management

Creation or enhancement of riparian-dependent resources, such as wildlife and fish habitat or recreation opportunities, is highly appropriate.

Riparian area management includes the riparian zone and the riparian zone of influence (see Figure A, page 10 of the Draft Management Plan).

1) Perennial Streams

Along perennial streams, streamside management zones would be established to meet fisheries and wildlife management objectives. The distances, listed in Table III-1, are for each side of a stream, and could be located within a wider riparian area.

Table III-1. Streamside Management Zone Distances.

<u>STREAM WIDTH (bankfull) -</u>	<u>STREAMSIDE MANAGEMENT ZONE</u>
<i>defined stream channel-<10'</i>	<i>75'+2'/1% slope</i>
<i>>10'</i>	<i>100'+2'/1% slope</i>

As stream width increases, the size of large woody debris must also increase to be effective in the formation of quality fish habitat. To provide long-term input of large woody debris to a stream, a sufficient number of trees within the streamside management zone should be allowed to grow to biological maturity. These trees, as some begin to fall naturally into streams, create habitat diversity for aquatic life. These zones do not necessarily follow riparian area boundaries and are the most effect effective on tributaries to the Allegheny River.

2) Intermittent Streams

Intermittent streams within the corridor should be managed to:

- maintain trees that are providing streambank stability;*
- maintain trees growing within a stream channel for stability purposes;*

- *provide for continued input of leaf litter (intermittent streams transport leaf litter by periodic flushings into downstream reaches of perennial waters, as well as provide habitat for aquatic invertebrates within these intermittent channels [Williams and Hynes 1976, Williams and Hynes 1977]); and*
- *continue with the current Forest Plan standard and guideline of a suggested filter strip width during timber harvesting of 50'+2'/1% slope (Forest Plan page 4-24), or the actual size of the riparian area, whichever is larger.*

MINERALS AND GEOLOGY

All minerals under the Buckaloons Historic District are federally owned. No surface occupancy stipulations are applicable.

TRANSPORTATION

Protect cultural and recreational resource values when developing road access from or through the area.

Allow new road access across the area when no other reasonable alternatives exist and then only with maximum protection of historical, visual, and recreational values. Mitigate effects of roads on recreational and cultural values.

FIRE MANAGEMENT

Limit size of individual wildfires.

Treat activity and natural fuels to meet the area's resource and visual objectives.

Use prescribed fire from planned ignitions as needed to achieve Forest Plan Direction for wildlife, recreation and heritage resource management.

Confine, contain, or control wildfires. Be consistent with adjacent area management direction.

Protect heritage resources during suppression activities.

APPENDIX G

MANAGEMENT GUIDELINES (APPLICABLE TO STATE- OWNED LANDS) FOR ALL CLASSIFICATIONS OF SCENIC RIVER SEGMENTS

OCTOBER 1984

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Pennsylvania Department of Conservation and Natural Resources
Program Planning and Development
Scenic Rivers

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APPENDIX G

Appendix G contains the Standards and Guidelines that are applicable to state-owned lands within state-designated Scenic Rivers. Private land owners are encouraged to consider these guidelines when planning management projects on their land.

MANAGEMENT GUIDELINES FOR ALL CLASSIFICATIONS OF SCENIC RIVER SEGMENTS OCTOBER 1984

SUMMARY OF MANAGEMENT GUIDELINES FOR ALL CLASSIFICATIONS OF SCENIC RIVER SEGMENTS

ATTRIBUTE	WILD	SCENIC	PASTORAL	REC.	MOD.REC.
1. <u>Dams and Encroachments</u>					
* Existing Structures	Y	Y	Y	Y	Y
* New Dams/impending Structures	N	N	N	Y	Y
* New fishery/wildlife management Structures	Y	Y	Y	Y	Y
* Streambank Stabilization	Y	Y	Y	Y	Y
* Channel Modification	Y	Y	Y	Y	Y
2. <u>Earthmoving Activities</u>					
* Large Scale Activities	N	N	N(except agriculture)	Y	Y
* Small Scale Activities	Y	Y	Y	Y	Y
* Agricultural Practices	--	Y	Y	Y	Y
3. <u>Floodplain Management</u>					
* Multiple Use	N	Y	Y	Y	Y
* Maintenance of Floodplain Values	Y	Y	Y	Y	Y
4. <u>Forest Management</u>					
* Timbering/tree felling	Y(>200')	Y(>100')	Y	Y	Y
* Skidding of Logs Across Waterway	N	N	N	--	--
* Log Landings/holding Areas	Y(>200')	Y(>100')	Y(>50')	--	--
* Forestry Mgmt./use Structures	Y(>200')	Y(>100')	Y(>50')	Y(>50')	Y(>50')
5. <u>Mineral and Fuel Extraction</u>					
* Surface Mining (reclamation only)	Y	Y	Y	Y	Y
* Oil and Gas Extraction	Y(>200')	Y(>100')	Y(>50')	Y	Y
* Drilling Activities	Y(>200')	Y(>100')	Y(>50')	Y	Y
6. <u>Recreation Use</u>					
* New Public Access Use	N	Y(with restrictions)	Y	Y	Y
* Motorized (non-motorized recreation users)	Y	Y	Y	Y	Y
* Motorized Watercraft	N	Y	Y	Y	Y

ATTRIBUTE		WILD	SCENIC	PASTORAL	REC.	MOD.REC.
7.	Utility and Transportation Corridors					
*	Electric Lines, Existing Oil and Gas Pipelines	Y	Y	Y	Y	Y
*	Rights-of-Way Expansions	N	Y	Y	Y	Y
*	New Public Roads/Bridges	N	Y	Y	Y	Y
*	New Service Roads, Trails, Convenience AMD Facilities, Gauging Stations	Y	Y	Y	Y	Y
8.	Waste Disposal					
*	New Facilities For Wastewater Treatment	N	N	Y	Y	Y
*	Wastewater Discharges	Y	Y	Y	Y	Y
*	Solid Waste Sites	N	N	N	Y	Y
*	Hazardous Waste	N	N	N	N	N
9.	Water Quality/Quantity					
*	Development Considerations	--	Y(with restrictions)	Y	Y	Y
*	Natural Flow Volumes	Y	Y	Y	Y	Y
*	Withdrawals	Y	Y	Y	Y	Y

WILD CLASSIFICATION

MANAGEMENT GUIDELINES FOR WILD RIVERS

A Wild River corridor is characterized by the high quality of natural and scenic attributes, virtually untouched by human activities. The corridor encompasses the river, and surrounding land as viewed from the river. In areas of steep topography, the corridor may extend from ridgetop to ridgetop, but would at the very least include those scenic and natural areas which truly enhance the value of the river environment.

These Guidelines show how certain attributes of a Wild River corridor segment should be treated as a formally designated component of the Pennsylvania Scenic Rivers System.

State agencies charged with the administrative responsibility of managing Commonwealth lands are required to adhere to these Guidelines in order to maintain consistency in the State's policy and practices pertaining to the protection of Pennsylvania's Scenic Rivers.

Property owners within the Wild River corridor are encouraged to protect their natural resources by voluntarily employing conservation practices suggested in these Guidelines,

Municipal governments may find that these Guidelines provide a basis for developing environmentally sensitive comprehensive plans and ordinances for their communities.

These Guidelines address resource management for the following land and water activities:

1. Dams and Encroachments
2. Earthmoving Activities
3. Floodplain Management
4. Forest Management
5. Mineral and Fuel Extraction
6. Recreation Use
7. Utility and Transportation Corridors
8. Waste Disposal
- 9.. Water Quality/Quantity

1. Dams and Encroachments

- * Existing structures essential to the maintenance or restoration of fish and wildlife habitat and lawfully in existence on or before the date of designation, may remain and be maintained or replaced, with native materials such as wood and/or stone. All repairs and replacements shall be performed in accordance with Pennsylvania Fish Commission construction standards for stream improvements,
- * No new dam or other structure or improvement which substantially impedes the natural flow of water will be permitted.
- * New stream improvement structures for fishery or wildlife management shall be permitted if approved by the Pennsylvania Department of Environmental Resources (DER) and the Fish Commission, and/or Game Commission.

- * Streambank stabilization shall be permitted in accordance with applicable laws, guidelines and standards established for these activities. Special requirements may be established to minimize adverse visual impacts on the environment.
- * Channel modifications shall be considered on a case-by-case basis when necessity to correct local problems. Modifications must be designed to maintain the wild character of the river environment, be authorized by DER permit and performed in accordance with DER standards.

2. Earthmoving Activities

- * Large scale earthmoving activities shall not be permitted.
- * Small scale earthmoving activities are permitted, however, a vegetative buffer must be maintained along the waterway' to impede soil from entering the waters, and to screen the activity from the river user.

3. Floodplain Management

- * Multiple-use concepts are not applicable to maintenance of a primitive river environment. Floodplain areas should maintain the natural and wild values of the designated waterway.
- * Management plans developed must be in accordance with the State Floodplain Management Act, and recognize the necessity to preserve the wild quality and natural amenities of the river corridor.

4. Forest Management

- * No trees or other vegetation shall be harvested, cut, culled, thinned, removed or otherwise disturbed on Commonwealth lands within 200 feet of the designated waterway, except those which pose a threat to bank undercutting or erosion or to public health and safety.
- * Between the 200 foot no-cut zone and the designated corridor limit, timber harvesting on Commonwealth lands shall be conducted in accordance with uneven-aged management techniques. Limited even-aged timber management shall be permitted to accommodate forest management and for the special purposes of improving wildlife habitat and salvage cutting areas damaged by fire, wind, insects or disease in accordance with State Forest Resource Plans and State Game Land Management Plans. No-cutting shall be permitted on slopes greater than 35°.
- * All timber harvesting operations shall be subject to the requirements of Pennsylvania's erosion and sedimentation control standards.
- * No trees shall be felled nor logs skidded into or across a designated river segment; any logging debris entering the waterway shall be removed.
- * Following timber harvesting vegetation shall be restored on all landings, skid trails, and logging roads within the designated corridor. Upon completion of timber harvesting operations, logging roads on Commonwealth lands shall be closed and gated.
- * No new log landings or holding areas shall be established on Commonwealth lands within the 200 foot no-cut zone.
- * Forest management and forestry use structures shall be permitted between the 200 foot no-cut zone and the designated corridor limit.

5. Mineral and Fuel Extraction

- * Surface mining to reclaim previously mined areas and to abate acid mine drainage shall be permitted subject to special reclamation measures required by the Department of Environmental Resources. Reclamation within the corridor requires that processing equipment and haul roads be screened from river users.
- * Oil and gas extraction shall be accomplished by drilling from outside the designated corridor, unless it can be proven that drilling within the corridor is the only feasible extraction procedure, and will not substantially impact the wild character of the designated waterway.
- * In the designated corridor, no drilling can occur within 200 feet of the waterway; all service roads to the drill site should be inconspicuous. Extraction equipment and service roads should be screened from river users. All service roads should be gated when not in use.

6. Recreation Use

- * New public access points including service roads, trails and bridges will be limited to areas necessary to solve existing management problems. New foot trails shall not exceed 2-3 feet in width.
- * Low density, non-motorized recreation uses shall be permitted on Commonwealth lands within the designated corridor; where motorized recreational use occurs within the corridor, it may be maintained at the discretion of the administering agency.
- * Special rules and regulations may be used by Commonwealth agencies to regulate recreational use of Commonwealth lands and navigable waters, including the activity, number, and location of users to prevent damage to natural resources and to protect the quality of the user's recreational experience.
- * Motorized watercraft are not permitted, except for emergency use.

7. Utility and Transportation Corridors

- * Existing electric transmission and distribution lines, oil pipelines, and gas pipelines are permitted. If new lines can be incorporated within the existing right-of-way, they shall be permitted. Any expansion of the existing right-of-way, or new right-of-way established for new transmission lines within the corridor must be reviewed and evaluated on a case-by-case basis.
- * In general, no new public roads or bridges shall be permitted{ any proposed roadway or bridge project, other than those required for forest game or fishery management purposes must be reviewed and evaluated on a case-by-case basis. New construction must be in accordance with an approved erosion and sedimentation control plan. New construction shall comply with DER design standards for service roads. (See Soil Erosion and Sedimentation Control Guidelines for Forestry, Pennsylvania Department of Environmental Resources, Bureau of Soil and Water Conservation.)
- * Convenience facilities, AMD abatement facilities, gauging stations, and other management facilities shall be permitted within the designated corridor, provided they are adequately screened from the river user and there is no adverse impact on the wild character of the corridor.

8. Waste Disposal

- * New facilities for treatment of waste water shall not be permitted within designated corridors except in cases where such facilities are necessary to solve existing problems~ and are sited and screened with native vegetation to minimize visual impact.
- * No new wastewater discharges are permitted within the corridor.
- * Existing discharges of waste water shall be permitted within the designated *corridor* provided such discharges are currently permitted by DER and comply with water quality standards established for the waterway.
- * New solid waste sites shall not be permitted. An existing solid waste site which lies within a designated corridor may continue under current permit provided it does not cause degradation of the area in excess of the level in existence at the time of designation.
- * Siting of new hazardous waste facilities within the corridor is not permitted. New hazardous waste treatment, incineration and storage activities are not permitted.

9. Water Quality/Quantity

- * Water quality planning and management actions shall not encourage new development.
- * Natural flow volumes shall be maintained.
- * Withdrawals shall be permitted within the designated waterway provided such withdrawals do not adversely affect aquatic ecology or the potential for recreational uses normally associated with the designated segment in its natural condition. Withdrawals must also conform to present requirements of the appropriate river basin commission as well as DER water allocation rules and regulations.

SCENIC CLASSIFICATION

MANAGEMENT GUIDELINES FOR SCENIC RIVERS

A Scenic River corridor is characterized by the high quality of natural and scenic attributes, relatively untouched by human activities. The corridor encompasses the river, and generally includes the surrounding land as viewed from the river. It is comprised of those adjacent lands necessary to conserve the scenic and natural areas which truly enhance the value of the river environment.

These Guidelines show how certain attributes of a Scenic River corridor should be treated as a formally designated component of the Pennsylvania Scenic River System.

State agencies charged with the administrative responsibility of managing Commonwealth lands are required to adhere to these Guidelines in order to maintain consistency in the State's policy and practices pertaining to the protection of Pennsylvania's Scenic Rivers.

Property owners within the Scenic River corridor are encouraged to protect their natural resources by voluntarily employing conservation practices suggested in these Guidelines.

Municipal governments may find that these Guidelines provide a basis for developing environmentally sensitive comprehensive plans and ordinances *for* their communities.

These Guidelines address resource management for the following land and water activities:

1. Dams and Encroachments
2. Earthmoving Activities
3. Floodplain Management
4. Forest Management
5. Mineral and Fuel Extraction
6. Recreation Use
7. Utility and Transportation Corridors
8. Waste Disposal
9. Water Quality/Quantity

1. Dams and Encroachments

- * Existing structures essential to the maintenance or restoration of fish and wildlife habitat and lawfully in existence on or before the date of designation, may remain and be maintained or replaced, preferably with native materials such as wood and/or stone. All repairs and replacements shall be performed in accordance with Pennsylvania Fish Commission construction standards for stream improvements, and permitted where required by the Pennsylvania Department of Environmental Resources.
- * No new dam or other structure or improvement which substantially impedes the natural flow of water shall be permitted.
- * New stream improvement structures for fishery or wildlife management shall be permitted if approved by the Pennsylvania Department of Environmental Resources (DER), Pa. Fish Commission, and/or Pa. Game Commission

- * Streambank stabilization shall be permitted in accordance with applicable laws, guidelines and standards for such activities. Special requirements may be established to minimize adverse visual impact on the environment.
- * Channel modifications shall be permitted when necessary to correct local problems, provided such modifications are authorized by DER permit and performed in accordance with DER standards.

2.. Earthmoving- Activities

- * Large scale earthmoving activities shall not be permitted.
- * Small-scale earthmoving activities shall be permitted provided a vegetative buffer is maintained along the waterway to prevent soil from entering the water and to provide a natural screen for the river user.
- * Agricultural practices within the designated corridor shall be governed by applicable sections of the Pennsylvania Clean Streams Law pertaining to soil erosion and sedimentation control plans.

3. Floodplain Management

- * Compatible multiple use of floodplain areas should be considered in planning efforts to provide for wise utilization of the floodplain area and scenic or recreational enhancement of the designated waterway.
- * Management plans should be developed in accordance with the State Floodplain Management Act; recognizing floodplains as transitional zones which are best maintained when limited to non-intensive use.

4. Forest Management

- * No trees or other vegetation shall be harvested, cut, culled, thinned, removed or otherwise disturbed on Commonwealth lands within 100 feet of the designated waterway, except those which pose a threat to bank undercutting, erosion or public health and safety.
- * Between the 100 foot no-cut zone and the designated corridor limit, timber harvesting on Commonwealth lands shall be conducted in accordance with uneven-aged management techniques. Limited even-aged timber management shall be permitted to accommodate forest management and low-density recreational activities; and for the special purposes of improving wildlife habitat and salvage cutting areas damaged by fire, wind, insects or disease in accordance with State Forest Resource Plans and State Game Land Management Plans. No cutting shall be permitted on slopes greater than 350.
- * All timber harvesting operations shall be subject to the requirements of Pennsylvania's erosion and sedimentation control standards.
- * No trees shall be felled nor logs skidded into or across a designated river segment; logging debris entering the waterway shall be removed.
- * Provisions shall be made after timber harvesting to restore vegetation on all landings, skid trails, and logging roads on Commonwealth lands in the designated corridor. With the completion of timber harvesting operations, logging roads on Commonwealth lands shall be closed and gated.

- * No new log landings or holding areas shall be established on Commonwealth lands within the 100 foot no-cut zone.
- * Forest management and forestry use structures shall be permitted between the 100 foot no-cut zone and the designated corridor limit.

5. Mineral and Fuel Extraction

- * Surface mining to reclaim previously mined areas and to abate acid mine drainage shall be permitted subject to special reclamation measures required by the Department of Environmental Resources. Reclamation within the corridor requires that processing equipment and haul roads be screened from river users.
- * Oil and gas extraction shall be accomplished by drilling from outside the designated corridor, unless it can be proven that drilling within the corridor is the only feasible extraction procedure, and will not substantially impact the Scenic character of the designated waterway.
- * In the corridor, no drilling can occur within 100 feet of the waterway; all service roads to the drill site should be inconspicuous. Extraction equipment and service roads should be screened from river users. All service roads should be gated when not in use.

6. Recreation Use

- * New, selected public access points to the river, including roads, trails and bridges may be permitted, but are limited to those areas necessary to solve existing recreation or management problems. Access points should be identified during the development of the management plan in order to alleviate trespassing and litter problems which may exist on private property.
- * Motorized or non-motorized vehicles may be permitted on Commonwealth lands within the river corridor if they are in conformance with agency land management plans.
- * Motorized watercraft shall not be permitted except where such use is consistent with the character of the designated waterway or when necessary for emergency purposes. Where permitted, motorized water-craft shall be operated in accordance with Pennsylvania's boating laws.

7. Utility and Transportation Corridors

- * Siting of major public utilities such as electric transmission lines, oil pipelines and gas pipelines shall be permitted within existing rights-of-way or in locations where adverse visual and/or environmental impacts and significant damage to natural resources can be avoided. If crossing an undisturbed or undeveloped area, the line shall be sited to blend into the existing landscape. Maximum use shall be made of existing rights-of-way along existing roads, bridges, railroads, utility lines, etc.
- * Siting of electric distribution lines, oil pipelines, gas pipelines, telephone cables, etc. shall be placed underground where economically feasible. Where undergrounding is not feasible, the utility shall utilize existing rights-of-way along roads, bridges, and railroads, and consolidate lines during system repairs, additions or where lines cross water courses.
- * New public roads shall have a right-of-way no greater than 50 feet from the center line. Where bridge replacement or repair is required additional footage will be permitted in those cases where bridge replacement will provide needed river access. Following construction, only rights-of-way necessary to maintain the transportation facility will be retained. Construction, repair or alteration

shall be consistent with "Guidelines to Improve the Aesthetic Quality of Roads in Pennsylvania", Departments of Transportation and Environmental Resources, June 1978.

- * New service roads, foot trails, gauging stations, convenience and AMD facilities are permitted, but must be designed and constructed to blend into the surrounding river environment. Vegetative screening shall be utilized to maintain the natural qualities of the river by obscuring the facilities from the view of the river user.

8. Waste Disposal

- * New facilities for treatment of waste water shall not be permitted within designated corridors except in cases where such facilities are necessary to solve existing problems, and are sited and screened with native vegetation to minimize visual impact.
- * Waste water collection systems shall be permitted within designated waterway corridors provided such systems are designed with special consideration for the protection of the natural, biological, geological, scenic and aesthetic qualities of the river corridor.
- * Existing discharges of waste water shall be permitted within the designated corridor provided such discharges are currently permitted by DER and comply with water quality standards established for the waterway.
- * *Solid Waste.* New solid waste sites shall not be permitted. A solid waste site in an established corridor shall continue to expiration provided it does not increase degradation of the area beyond the level in existence at the time of designation.
- * Siting of new hazardous waste facilities within the corridor is not permitted. New hazardous waste treatment, incineration and storage activities are not permitted.

9. Water quality/quantity

- * Water quality standards established by DER shall be maintained through planning and management actions which are consistent with maintaining the natural values of the corridor.
- * Natural flow should be maintained, however, minimal change may be permitted within the designated waterway corridor provided it does not jeopardize aquatic ecology or the potential for recreational use normally associated with the waterway in its natural condition.
- * Withdrawals may be permitted provided the aquatic ecology of the waterway is maintained and the withdrawal conforms to present requirements of the appropriate river basin commission as well as DER water allocation rules and regulations.

PASTORAL CLASSIFICATION

MANAGEMENT GUIDELINES FOR PASTORAL RIVERS

A Pastoral River corridor is characterized by the qualities found in the rural environment including both natural and man-made values. The corridor in general encompasses the river, and a portion of the surrounding land as viewed from the river; it comprises those adjacent land areas which truly enhance the value of the river environment.

These Guidelines provide a framework to maintain the attributes of a Pastoral River corridor, and show how it should be treated as a formally designated component of the Pennsylvania Scenic Rivers System.

State agencies charged with the administrative responsibility of managing Commonwealth lands are required to adhere to these Guidelines in order to maintain consistency in the State's policy and practices pertaining to the protection of Pennsylvania's Scenic Rivers.

Private property owners within the Pastoral River corridor are encouraged to protect their natural resources by voluntarily employing conservation practices suggested in the Guidelines.

Municipal governments may find that these Guidelines provide a basis for developing environmentally sensitive comprehensive plans and ordinances for their communities.

These Guidelines address resource management for the following land and water activities:

1. Dams and Encroachments
2. Earthmoving Activities
3. Floodplain Management
4. Forest Management
5. Mineral and Fuel Extraction
6. Recreation Use
7. Utility and Transportation Corridors
8. Waste Disposal
9. Water Quality/Quantity

1. Dams and Encroachments

- * Existing structures and small impoundments essential to the maintenance or restoration of fish and wildlife habitat, lawfully in existence on or before the date of designation, may remain and be maintained or replaced with native materials such as wood and/or stone. All repairs and replacements shall be performed in accordance with Pennsylvania Fish Commission construction standards for stream improvements.
- * Mill dams or similar structures/impoundments which add to the historic character of the river are permissible. Restoration or improvement to increase historical or recreational opportunities shall be performed in accordance with Pennsylvania Fish Commission construction standards.
- * Bank stabilization and stream clearance shall be permitted in accordance with applicable laws, guidelines and standards for such activities. Special guidelines may be established to minimize adverse visual impacts on the environment.

- * Channel modifications shall be permitted when necessary to correct local problems, provided such modifications are authorized by DER permit and performed in accordance with DER standards.

2. Earthmoving Activities

- * Large scale earthmoving activities other than normal agricultural practice shall not be permitted.
- * Where small scale earthmoving activities are necessary, a vegetative buffer must be maintained to prevent soil from entering the water and to provide a natural screen for the river user..
- * Agricultural practices constitute the major land development patterns of the area; maintenance of agrarian land use should rely on sensitive farming techniques which conserve top soil and prevent erosion.

3. Flood Management

- * Floodplain management should recognize the multiple use concepts of a designated Pastoral river in their planning efforts.
- * Floodplain areas should maintain the Pastoral value of the designated waterway. Management plans developed must be in accordance with the State Floodplain Management Act.

4. Forest Management

- * Within the designated corridor limit, timber harvesting on Commonwealth lands shall be conducted in accordance with uneven-aged management techniques. Even-aged timber management shall be permitted to accommodate forest management and low density recreational activities for the special purposes of improving wildlife habitat and salvage cutting areas damaged by fire, wind, insects or disease in accordance with State Land Management Plans. No cutting shall be permitted on slopes greater than 35°.
- * All timber harvesting operations shall be subject to the requirements of Pennsylvania's erosion and sedimentation control standards.
- * No trees shall be felled, no logs skidded into or across a designated river segment; logging debris entering the designated waterway shall be removed.
- * Provisions shall be made after timber harvesting to restore vegetation on all landings, skid trails, and logging roads on Commonwealth lands in the designated corridor. With completion of timber harvesting operations, logging roads on Commonwealth lands shall be closed and gated.
- * No log landings or holding areas shall be established on Commonwealth lands within 50 feet of designated waterway.

5. Mineral and Fuel Extraction

- * Surface mining to reclaim previously mined areas and to abate acid mine drainage shall be permitted subject to special reclamation measures required by the Department of Environmental Resources. Reclamation within the corridor requires that processing equipment and haul roads be screened from river users.

- * Oil and gas extraction shall be accomplished by drilling from outside the designated corridor, unless it can be proven that drilling within the corridor is the only feasible extraction procedure and will not substantially impact the Pastoral character of the designated corridor.
- * In the corridor, no drilling can occur within 50 feet of the streambank. All service roads to the drill site should be inconspicuous, Extraction equipment and service roads should be screened from river users. All service roads should be gated when not in use.

6. Recreation Use

- * New public access is permissible; but should only be considered in areas where it would complement the existing land development patterns and Pastoral character of the river. Appropriate use would focus on low key, low intensity activities such as fishing, hiking, nature study, historic interpretation, and canoeing.
- * Auxiliary facilities (e.g, parking lots) are compatible with this classification; however, siting locations should be sensitively chosen to allow blending into the existing river environment.
- * Use of motorized and non-motorized vehicles will depend on the rules and regulations established by Commonwealth agencies to regulate recreational uses on Commonwealth lands and navigable waters including the activity, number and location of users, to prevent damage to natural resources and to protect private property rights and the quality of the users' recreational experience.
- * Motorized watercraft shall not be permitted except where such use is consistent with the character of the designated waterway or when necessary for emergency purposes. Where permitted, motorized watercraft shall be operated in accordance with Pennsylvania boating laws.

7. Utility and Transportation Corridors

- * Siting of major public utilities such as electric transmission lines, oil pipelines and gas pipelines shall avoid or minimize to the greatest extent possible adverse visual and/or environmental impacts and damage to the natural resources. Maximum use shall be made of rights-of-way along existing roads, bridges, railroads, utility lines, etc. when siting is undertaken. Expanded rights-of-way are preferable to new right-of-way alignment.
- * *Distribution Lines.* Siting of electric distribution lines, telephone cables and the like shall be located along existing rights-of-way of roads, bridges, railroads, utilities etc. wherever possible. When crossing an undisturbed or undeveloped area, the line shall be sited to blend into the landscape to the greatest extent possible. Consolidation of lines shall be a primary objective where there is restructuring of an old system where new lines are to be added; particularly in cases where lines cross the watercourse. Undergrounding is encouraged where possible.
- * New public roads, including bridges shall be permitted. Roads shall have a right-of-way no greater than 50 feet from the center line. Where bridge replacement or repair is required, additional footage will be permitted in those cases where bridge construction will provide needed river access. All construction, reconstruction, repair or alterations shall be consistent with the Guidelines to Improve the Aesthetic Quality of Roads in Pennsylvania, prepared jointly by the Pennsylvania Department of Transportation and the Pennsylvania Department of Environmental Resources (June 1978).

- * New service roads, foot trails, gauging stations, convenience and AMD facilities are permitted; but must be designed and constructed to blend into the surrounding river environment. Vegetative screening shall be utilized to maintain the natural values of the river by obscuring the facilities from the river user.

8. Waste Disposal

- * New facilities for wastewater treatment of liquid waste shall be permitted within designated corridors where such facilities are necessary to solve existing problems, and are sited and screened with native vegetation to minimize visual impact.
- * Wastewater collection mains shall be permitted provided they do not degrade water quality, aesthetics, or interfere with recreational use within the corridor.
- * No new solid waste disposal sites shall be permitted. A solid waste site in an established corridor shall continue to the permit expiration date in existence at the time of designation.
- * *Hazardous Waste.* Siting of new facilities within the corridor is not permitted. Hazardous waste treatment incineration and storage activities are not permitted.

9. Water Quality/(Quantity

- * Development considerations must focus on maintenance of the river environment and aquatic habitat while fulfilling the needs of the agricultural community; recreational aspects and multiple use concepts should also be developed to allow full utilization and enjoyment of the water resource.
- * Natural flow volumes should be maintained, however, minimal changes may be permitted, provided they do not jeopardize aquatic ecology or the potential for recreational use normally associated with the waterway in its natural condition.
- * Withdrawals shall be permitted within the designated waterway corridor to provide for livestock watering and irrigation and to accommodate the full range of agricultural practices which exist within the corridor. Limited amounts of water may be diverted from the stream to supply farm ponds or for small scale power generation. Withdrawals must conform to the present requirements of the appropriate river basin commission.

RECREATIONAL CLASSIFICATION

MANAGEMENT GUIDELINES FOR RECREATION RIVERS

A Recreational River corridor is characterized by a waterway and adjacent land area as influenced by moderate to extensive human activities. The corridor encompasses the river and some surrounding land as viewed from the river; the corridor boundary may be either man-made e.g. highways or rail lines or natural e.g. floodplains. It comprises those historic, cultural, aesthetic and recreational values which truly enhance the appreciation of the river environment.

These Guidelines provide a framework to maintain the attributes of a Recreational River *corridor* and show how it should be treated as a formally designated component of the Pennsylvania Scenic Rivers System.

State agencies charged with administrative responsibility of managing Commonwealth lands are required to adhere to these Guidelines in order to maintain consistency in the State's policy and practices pertaining to the protection of Pennsylvania's Scenic Rivers.

Private property owners within the Recreational River corridor are encouraged to protect their natural resources by voluntarily employing conservation practices suggested in these Guidelines.

Municipal governments may find that these Guidelines provide a basis for developing environmentally sensitive comprehensive plans and ordinances *for* their communities.

These Guidelines address resource management for the following land and water activities:

1. Dams and Encroachments
2. Earthmoving Activities
3. Floodplain Management
4. Forest Management
5. Mineral and Fuel Extraction
6. Recreation Use
7. Utility and Transportation Corridors
8. Waste Disposal
9. Water Quality/Quantity

1. Dams and Encroachments

- * Existing dams and structures lawfully in existence on or before the date of designation, may remain and be maintained or replaced. If economically feasible and aesthetically beneficial, native materials such as wood and/or stone should be used to enhance the natural qualities of the waterway. All repairs and replacements shall be performed in accordance with Pennsylvania Fish Commission construction standards for stream improvements.
- * New dam and impounding structures will be stringently controlled. Any new construction must be low, maintain in channel flow and not back water beyond bank full width.
- * New stream improvement structures for fishery and wildlife management shall be permitted if approved by the Pennsylvania Department of Environmental Resources and the Pennsylvania Fish Commission and/or Pennsylvania Game Commission.

- * Streambank stabilization and stream clearance shall be permitted in accordance with applicable laws, guidelines and standards for such activities. Special requirements may be established to minimize adverse visual impacts on the environment.
- * Channel modifications shall be permitted when necessary to correct local problems provided such modifications are authorized by DER permit and performed in accordance with DER standards.

2. Earthmoving Activities

- * Where large scale earthmoving activities are necessary, a vegetative buffer must be maintained to prevent soil from entering the waters and to provide a natural screen for the river user. All such earthmoving activities must adhere to an approved erosion/sedimentation control plan.
- * Where small scale earthmoving activities are required within the corridor; a vegetative buffer must be maintained to screen the activity from the river user. Depending on the extent of the disruption a sedimentation control plan may be required.
- * Agricultural practices should rely on techniques which are advantageous for the retention of top soil. Maintenance of a vegetative strip along the river bank is advantageous to both the farmer and river user and is strongly recommended.

3. Floodplain Management

- * Compatible multiple use of floodplain areas should be considered in planning efforts to provide wise utilization of the floodplain area and scenic or recreational enhancement of the designated waterway.
- * Management plans must be developed in accordance with the State Floodplain Management Act.

4. Forest Management

- * Tree removal from Commonwealth lands within the designated corridor shall be permitted in accordance with uneven-aged management techniques and to the extent necessary to accommodate medium density recreational activities. Trees and vegetation may also be removed, should they pose a threat to public health, safety, or are likely to accelerate bank undercutting or erosion. Harvesting shall be in accordance with State Land Management Plans. No cutting shall be permitted on slopes greater than 35°.
- * New forestry management or forestry use structures are permitted if set back 50 feet or more from the waterway.

5. Mineral and Fuel Extraction

- * Surface mining to reclaim previously mined areas and to abate acid mine drainage shall be permitted subject to special reclamation measures required by the Department of Environmental Resources. Reclamation within the corridor requires that processing equipment and haul roads be screened from river users.
- * Oil and gas extraction shall be accomplished by drilling from outside the designated corridor, unless it can be proven that drilling within the corridor is the only feasible extraction procedure, and will not substantially impact the Recreational character of the designated corridor.

- * No drilling can occur within 20 feet of the stream bank. Extraction equipment and service roads should be screened from river users.

6. Recreation Use

- * New public access points should be considered in the planning and management of the river corridor. Multiple use concepts are particularly effective and are recommended to accommodate a variety of options in high intensity use areas. Multiple use of transportation and utility corridors should be investigated, to determine whether contractual agreements of the-administrating agencies can accommodate public use,
- * The use of motorized public land management personnel should be contracted for specific site use information and non-motorized recreational vehicles may be permitted on Commonwealth lands within the designated corridor provided such uses are in conformance with agency land management plans and operated in accordance with all applicable rules and regulations. Siting of any new facilities must minimize visual and audible impacts on property owners and river users.
- * Recreational facilities including public parks, private recreation facilities, commercial and nonprofit concessions, as well as auxiliary uses and structures (i.e., parking lots, cabins, etc.) shall be permitted.
- * Development should complement the existing character of the river. Camping and picnicking areas are permitted along designated recreational waterways, however, private property is not to be used for these purposes unless special permission has been granted by the owner.
- * Motorized watercraft shall be permitted where such use is consistent with the character of the waterway and the lifestyle of it's residents. Where permitted, motorized watercraft shall be operated in accordance with applicable Pennsylvania boating laws.
- * Special rules and regulations may be used by Commonwealth agencies to regulate recreational uses on Commonwealth lands and navigable waters (including the number and location of users); to prevent damage to natural resources; to protect private property rights and the quality of the users' recreational experience,

7. Utility and Transportation Corridors

- * Siting of major public utility uses such as electric lines, oil pipelines and gas pipelines shall avoid or minimize adverse visual and/or environmental impacts and damage to the natural resources.
- * Electric distribution lines, telephone cables, and the like shall be sited within existing rights-of-way of roads, bridges, railroads, utilities etc. where possible. When crossing an undisturbed or undeveloped area, the line shall be sited to blend into the natural landscape. Undergrounding is encouraged where possible.
- * Consolidation of lines shall be a primary objective where there is restructuring of an old system, where new lines are to be added, and particularly in cases where lines cross the watercourse. Expansion of existing right-of-way is preferable to establishment of new right-of-way.
- * New public roads, shall have a right-of-way no greater than 75 feet from the center line. New bridges are permitted within the designated corridor, they should be designed to maintain the existing character of the river environment and if possible provide additional river access within the right-of-way. Incorporation of a plaque on the upstream side of a bridge, identifying the highway route # is recommended to aid the river user in determining location on the river. All

construction, reconstruction, repair or alterations shall be consistent with the Guidelines to Improve the Aesthetic Quality of Roads in Pennsylvania, prepared jointly by the Pennsylvania Department of Transportation and the Pennsylvania Department of Environmental Resources (June 1978).

- * New service roads, gauging stations, trails, convenience and AMD abatement facilities within the corridor shall be permitted, but not required, within the designated corridor provided they are constructed and sited to blend into the river environment and are screened from the river user.

8. Waste Disposal

- * New facilities for treatment of liquid waste shall be permitted within a designated corridor where such facilities are necessary to solve existing problems and are sited and screened with native vegetation to minimize visual impact.
- * Waste water collection mains shall be permitted provided they do not interfere with recreational use, nor degrade water quality or aesthetics.
- * New and existing wastewater discharges within the corridor limits shall be permitted, provided that discharges comply with DER's water quality standards established for the waterway.
- * New solid waste disposal sites shall be permitted provided that special revegetation and restorative measures as established by DER are followed. All solid waste disposal operations must be screened from river users.
- * Hazardous Waste. Siting of new facilities within the corridor is not permitted. Hazardous waste, incineration and storage activities are not permitted.

9. Water Quality/Quantity

- * Management plans to establish or maintain wise use of the water resource and corridor area should include development considerations which focus on multiple use concepts, i.e., those that fulfill the required service needs of the community and still allow full utilization and enjoyment of the water resource.
- * Natural flow volumes should be maintained; however, minimal change may be permitted, provided it does not jeopardize the aquatic ecology or the potential for recreational use normally associated with the waterway in its natural condition.
- * Withdrawals shall be permitted within the designated waterway corridor provided such withdrawals do not jeopardize aquatic ecology or the potential for recreational uses normally associated with the waterway in its natural condition. Withdrawals must also conform to present requirements of the respective river basin commission.
- * Livestock watering and irrigation will be permitted to accommodate existing agricultural practices within the designated corridor. Limited amounts of water may be diverted from the stream to supply ponds or for power generation.

MODIFIED - RECREATIONAL CLASSIFICATION

MANAGEMENT GUIDELINES FOR MODIFIED RECREATIONAL RIVERS

A Modified Recreational River corridor is characterized by a waterway and adjacent land area which has undergone a substantial number of man-made modifications, and continues to be influenced and used by a high density population requiring a variety of land use patterns and socio-economic needs to fulfill necessary human activities. The corridor encompasses the river and some adjacent land viewed from the river; the corridor boundary may be either man-made e.g. a highway or rail line or natural e.g. floodplain. It is comprised of recreational opportunities, public use facilities and scenic, cultural and historic qualities which truly enhance the value of the river environment.

These Guidelines show how the attributes of a Modified Recreational corridor should be treated as a formally designated component of the Pennsylvania Scenic Rivers System.

State agencies charged with the administrative responsibility of managing Commonwealth lands are required to adhere to these Guidelines in order to main-rain consistency in the State's policy and practices pertaining to the protection of Pennsylvania's Scenic Rivers.

Property owners within the Modified Recreational River corridor are encouraged to protect their natural resources by voluntarily employing conservation practices suggested in these Guidelines.

Municipal governments may find that these Guidelines provide a basis for developing environmentally sensitive comprehensive plans and ordinances for their communities.

These Guidelines address resource management for the following land and water activities:

1. Dams and Encroachments
2. Earthmoving Activities
3. Floodplain Management
4. Forest Management
5. Mineral and Fuel Extraction
6. Recreation Use
7. Utility and Transportation Corridors
8. Waste Disposal
9. Water Quality/Quantity

1. Dams and Encroachment.

- * Existing dams and structures lawfully in existence on or before the date of designation, may remain and be maintained or replaced. If economically feasible and aesthetically beneficial, native materials such as wood and/or stone should be used to complement the natural qualities of the waterway. All repairs and replacements shall be performed with Pennsylvania Fish Commission construction standards for stream improvements.
- * New impounding structures are permitted, where necessary, provided the river does not exceed bankfull width during periods of normal flow.
- * New stream improvement structures for fishery and wildlife management shall be permitted if approved by the Pennsylvania Department of Environmental Resources and the Pennsylvania Fish Commission.

- * Streambank stabilization and clearance shall be permitted in accordance with applicable laws, guidelines, and standards for such activities. Special requirements may be established to minimize adverse visual impacts on the environment.
- * Channel modifications shall be permitted when necessary to correct local problems, provided such modifications are authorized by DER permit and performed in accordance with DER standards.

2. Earthmoving Activities

- * Where large scale earthmoving activities are undertaken, an approved erosion sedimentation plan must be utilized; heavy equipment and storage areas must be screened by a vegetative buffer and set back as far as possible from the river edge.
- * Where small scale earthmoving activities are necessary, a vegetative buffer must be maintained to prevent soil from entering the waters and to provide a natural screen for the river user.
- * Agricultural practices should rely on techniques which are successful in retaining top soil. Maintenance of a vegetative strip along the river banks is beneficial to both the farmer and river user and is strongly recommended.

3. Floodplain Management

- * Compatible multiple use of floodplain areas should be considered in planning efforts to provide for wise utilization of the floodplain area and scenic or recreational enhancement of the designated waterway.
- * Management plans must be developed in accordance with the State Floodplain Management Act.

4. Forest Management

- * Tree removal from Commonwealth lands within the designated corridor shall be permitted in accordance with uneven-aged management techniques; even aged management may be utilized to the extent necessary to accommodate medium to high density recreational activities. Harvesting shall be in accordance with State Land Management Plans. No trees shall be felled on slopes greater than 35°.
- * New forestry management or forestry use structures are permitted if set back and screened from the waterway.

5. Mineral and Fuel Extraction

- * Surface mining to reclaim previously mined areas and to abate mine acid drainage shall be permitted subject to special reclamation measures required by the Department of Environmental Resources.
- * Reclamation within the corridor requires that processing equipment and haul roads be screened from river users.
- * Oil and gas extraction shall be accomplished by drilling from outside the designated corridor, unless it can be proven that drilling within the corridor is the only feasible extraction procedure and will not substantially impact the recreational character of the designated corridor.

- * No drilling can occur within 50 feet of the stream bank in the corridor. Extraction equipment and service roads should be screened from river users.

6. Recreation Use

- * New public access and recreational facilities, including public parks, private recreation facilities, commercial and nonprofit concessions, as well as accessory uses and structures (i.e., trails, parking facilities, cabins, etc.) shall be permitted. Development should complement the existing character of the river. Camping and picnicking areas are permitted along designated Modified Recreational waterways, however, private property is not to be used for these purposes unless special permission has been granted by the owner. Multiple use concepts are particularly effective in high intensity use areas. Multiple use of transportation and utility corridors should be investigated to determine whether contractual agreements of the administrative agency can accommodate public use.
- * Special rules and regulations may be used by Commonwealth agencies to regulate recreational uses on Commonwealth lands and navigable waterways, including the number and location of users, to prevent damage to natural resources and to protect private property rights and the quality of the users' recreational experience.
- * The use of motorized recreational vehicles may be permitted on Commonwealth lands within the designated waterway corridor, provided such uses are in conformance with agency land management plans and operated in accordance with applicable rules and regulations. Siting should be developed to minimize visual and audible impacts on property owners and river users.
- * Motorized watercraft shall be permitted where such use is consistent with the character of the waterway and the lifestyle of its residents. Where permitted, motorized watercraft shall be operated in accordance with applicable Pennsylvania Boating Laws.

7. Utility and Transportation Corridors

- * Siting of major public utility uses, such as electric transmission lines, oil pipelines, and gas pipelines shall avoid or minimize adverse visual and/or environmental impacts and damage to the natural resources.
- * Electric distribution lines, telephone cables, and the Like, shall be sited within existing rights-of-way of roads, trails, bridges, railroads, and utilities where possible. The consolidation of lines shall be a primary objective where there is restructuring of an old system, where new lines are to be added, and particularly in cases where lines cross the watercourse. Right-of-way expansions are preferable to establishment of new rights-of-way.
- * New public roads shall have a right-of-way no greater than 75 feet from the center line. All construction, reconstruction, repairs or alterations, due to safety or capacity considerations shall be consistent with the Guidelines to Improve the Aesthetic Quality of Roads in Pennsylvania, prepared jointly by the Pennsylvania Department of Transportation and the Pennsylvania Department of Environmental Resources (June 1978).
- * New bridges are permitted within the designated corridor, they should be designed to maintain the existing character of the river environment and if possible provide additional river access within the right-of-way. Incorporation of a plaque on the upstream side of a bridge, identifying the highway route # is recommended to aid the river user in determining location on the river.

- * New service roads, trails, gauging stations, convenience and AMD facilities shall be permitted within the designated corridor provided they are sited and constructed to blend into the surrounding environment and screened from the river user.

8. Waste Disposal

- * New facilities for wastewater treatment shall be permitted within designated corridors where such facilities are necessary to solve existing problems, and are sited and screened with native vegetation to minimize negative visual impacts.
- * Wastewater collection mains shall be permitted, provided they do not degrade water quality, aesthetics or interfere with recreational use.
- * New discharges of wastewater shall be permitted within the designated waterway provided that present levels of water quality are not degraded, and that such discharges meet water quality standards as established by DER.
- * New disposal sites shall be permitted, provided that special revegetation and restoration measures are followed as established by DER. All solid waste disposal operations must be screened from river users.
- * Siting of new hazardous waste facilities within the corridor is not permitted. Hazardous waste treatment, incineration, and storage activities are not permitted.

9. Water Quality/Quantity

- * Development considerations must address the service and recreational need of the community within the context of wise utilization and protection of the water resource.
- * Multiple use concepts are often particularly applicable to high intensity use areas. This type of planning allows accommodation of a mix of service and recreational opportunities on the same land parcel.
- * Natural flow volumes should be maintained to the extent possible; demands put on the resource by industry, commercial enterprises, residential needs and recreational aspects allow for some change in natural flow. Flow rates must, however, be consistent with maintenance of DER water quality criteria and appropriate River Basin Commission requirements.
- * Withdrawals shall be permitted within the designated waterway corridor, provided they do not jeopardize the aquatic ecology or the potential for recreational uses generally associated with the waterway in its natural condition. Withdrawals must also conform to present requirements of the respective river basin commission.

APPENDIX H

LOCAL LAND MANAGEMENT
AND
ZONING GUIDELINES

ALLEGHENY WILD AND SCENIC RIVER

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APPENDIX H

LOCAL LAND MANAGEMENT & ZONING GUIDELINES ALLEGHENY NATIONAL WILD & SCENIC RIVER

INTRODUCTION

The Wild and Scenic Rivers Act (PL 90-542) and the legislation to designate segments of the Allegheny River as a component of the National Wild and Scenic River System (PL 102-271) require that the managing agency (the USDA Forest Service) provide land use guidelines for local governments. The intent is that governments will use these guidelines to develop local land use and zoning ordinances to encourage planned, orderly development while allowing for the protection of river values on private property.

The guidelines are based on management goals and objectives set forth in the U.S. Wild and Scenic Rivers Act and 1982 Final Revised Guidelines issued by the Secretaries of the Department of Agriculture and Interior, and on objectives developed from public comments and recommendations of the Northern and Southern Advisory Councils. The background discussion and guidelines draw extensively on a number of publications listed on pages F-15 and F-16. These publications are an excellent planning reference.

BACKGROUND AND PURPOSE

The United States Congress, in 1992, designated three segments of the Allegheny River, totaling 86.6 miles, as a component of the National Wild and Scenic Rivers System. Designated river segments in the national system are given one of three classifications, "wild, scenic or recreational", depending on the level of human influence and development along the river. All three segments of the Allegheny were given a "recreational" classification to recognize the highest level of human influence, i.e. road access and development. In designating the Allegheny River, Congress recognized that the river valley possesses certain outstanding natural, cultural and recreational characteristics, which should be protected for present and future generations. The greatest influence on resources within the river corridor will continue to be exerted by the private sector as 72 percent of the corridor is in private ownership. The amount of private land and the desire for limited federal control within the corridor prompted Congress to direct the Forest Service to develop a cooperative approach to river management. This approach relies principally on the actions of governments and citizens, working in close partnerships, to protect the river's resources on private lands.

Local and state governments have broad responsibilities and many authorities which can be used to protect river valley resources. Under Pennsylvania law, local government is given land use regulation responsibilities, including the power to implement zoning ordinances. County government may also do this, but local zoning ordinances supersede that of a county. Two counties and nine municipalities already have implemented zoning and/or subdivision ordinances or similar measures (see page 66 Allegheny Wild and Scenic River DEIS). In addition to meeting local needs, some of the current ordinances protect river values. It is hoped that municipal governments will use these guidelines to develop environmentally-sensitive comprehensive plans and ordinances for their communities or to modify existing plans and ordinances.

Implementation of these guidelines is dependent upon existing legal authorities; therefore, the guidelines are developed within the framework of those authorities now granted to local and state governments. The guidelines are not intended to require any local governments to take actions which might be inconsistent or contrary to Pennsylvania land use law or to require local governments to assume any of the existing responsibilities of state or federal agencies.

Private property owners within the river corridor are encouraged to protect their natural resources by voluntarily employing the conservation practices suggested in these guidelines and in the referenced documents.

There are constitutional limits on the extent to which the government can regulate land use. Landowners' rights are fundamentally protected by the fifth and fourteenth Amendments to the U.S. Constitution. If local governments adopt river conservation plans and zoning ordinances into law, this would not constitute a taking. Also new zoning would apply to new development and not existing uses. Current uses would either be zoned for the existing use or would be considered a non-conforming use in a new zone.

LOCAL PROTECTION TOOLS

Zoning is the most widely-used tool that local governments have at their disposal for managing community growth and development. Land use planning and zoning are effective tools to maintain a quality of life while providing for appropriate development. A community's zoning divides a community into sections or districts and prescribes what uses can be made of the land therein. Zoning can also prescribe the density of development in a community through provisions which establish setback distances, percentage of a lot that can be occupied, and minimum lot size which applies to the entire district [10]. Zoning can also be used to concentrate use in areas that have existing development. This is a positive way to direct growth and services away from areas such as steep slopes, floodplains and sensitive streamside areas where environmental problems could result. [15]

The Pennsylvania Municipalities Planning Code [6] authorizes local governments and counties to zone land (to impose regulations on the way land is used).

Under Section 603 of the Code, zoning ordinances may "permit, prohibit, regulate, restrict and determine:

- Uses of land, watercourses and other bodies of water;
- Size, height, bulk, location, erection, construction, repair, maintenance, alteration, razing, removal and use of structures;
- Areas by uses and structures, as well as areas, courts, yards, and other open spaces and distances to be left unoccupied by uses and structures; and
- Density of population and intensity of use."

Zoning ordinances may include "provisions for the protection and preservation of natural resources" [15].

Without provisions which specifically respond to stream and river conservation, zoning, as described above, may be inadequate to respond to river corridor management needs, because, landscape features within a river corridor are treated no differently than the rest of the district. Thus zoning may not take into account such development considerations as steep hillsides, scenic vistas, erosive sites, natural drainage, or important heritage resource sites. In recognition of this limitation, several variations of zoning have evolved which have specific application to stream or river corridor planning and management. These include provisions for establishing stream conservation districts and incentive zoning [10].

Each community in the river corridor is unique and has its own goals for the future. Therefore, individual communities will develop river conservation measures that will reflect their differing needs.. The purpose of these guidelines is to provide goals and objectives to be used by the various governments when crafting river conservation measures. Also provided are examples of how three communities developed waterway protection measures to meet similar goals and objectives. While the end results are the same, the three communities have developed different regulations.

1) Stream Conservation Districts

Communities can elect to establish stream conservation districts to protect and enhance the river, the river corridor and other streams within the corridor. Conservation districts can be established in two ways: through overlay zoning, where zoning already exists; or through the creation of a special stream conservation district in communities which have enacted new zoning ordinances.

As applied to stream corridors, overlay zoning delineates a stream conservation district through mapping, and it superimposes a set of regulations or standards and requirements on existing zoning.

A community which has not adopted a community-wide zoning ordinance may wish to protect its river and stream corridors through the adoption and enforcement, by local law, of a community-wide ordinance with a special stream conservation district. In this way special regulations, standards and restrictions can address the specific needs for protecting sensitive streamside zones while allowing for planned, orderly development of private lands.

2) Incentive Zoning

Incentive zoning, or bonus zoning as it is sometimes called, provides another approach to stream corridor management. Essentially, incentive zoning provides for a trading arrangement between the community and the property owner. In exchange for a developer providing something that the community feels is in its interest, i.e. the protection of a river shoreline area, more open space and the use of cluster development designs rather than lot-by lot development, the developer is given a bonus. The bonus is usually permission to build at greater density in the limited area to be developed.

Subdivision regulations are a tool to fashion development in defined ways and by prescribed methods so as to regulate the use of private land in the public interest. Within recent years, subdivision regulation has become increasingly broadened by incursions into the areas of: timing of development; wetlands and flood plain protection; reservation of land for recreational use; and other purposes and mandatory dedications of public space; and for protection against environmental degradation [10].

In this context, there is a relationship between stream corridor management and subdivision regulation. An example is the ability and necessity to control development in areas where the replacement of natural vegetation and undisturbed soil - which would normally absorb stormwater runoff - by artificial concrete, asphalt, and construction would lead to environmental degradation. Communities with or without zoning may enact subdivision regulations.

Several other regulatory techniques which have evolved out of zoning and the regulation of subdivisions are applicable to stream corridor management. These include: cluster zoning, planned unit development, transfer of development rights, and site plan review.

Pages F-15 and F-16 of this Appendix contain a bibliography of information on zoning practices, community development, streamside conservation and Best Management Practices (BMP's) and examples of specific stream/river zoning ordinances.

The federal Wild and Scenic Rivers Act and the "Secretary's Guidelines for Eligibility, Classification and Management of River Areas" [19] provide several management principles and objectives for river areas in the National system. Before addressing these principles and objectives however, it is important to understand factors, both natural and human influenced, which can affect a river or stream corridor.

Water quality impacts are categorized as either point or non-point in origin.

Point source pollutants come from a single, discernable source such as a dump site, sewage discharge, erosion from construction sites, road building, stream crossings, oil and gas wells and storage tanks, mine sites, etc.

Many activities which produce point source pollutants are controlled by existing laws and regulations; specifically, the Clean Water Act of 1972. The responsibility of enforcing the provisions of this Act is held jointly by states and the Environmental Protection Agency. Point source pollution is generally controlled by a permit-based system.

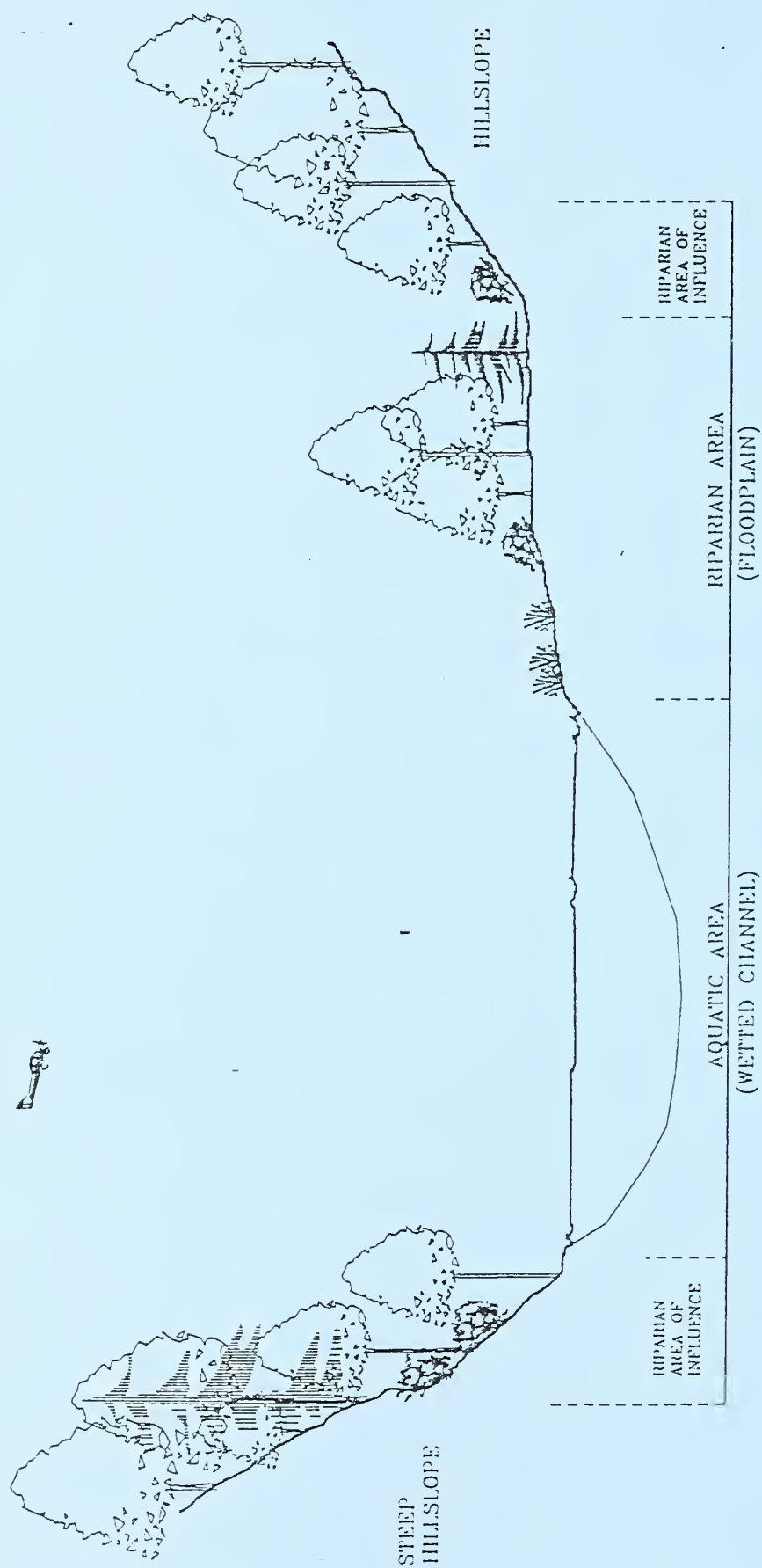
Local enforcement of these laws and regulations can help maintain water quality. Individual communities can further prevent possible water quality degradation from point source pollution by regulating which activities are permissible within stream/river conservation zones (in this case the river corridor) and by requiring mitigation measures for the activities which are permissible. For example, an activity prohibited in a river conservation zone may be the disposal of solid waste (a dump). The zone may allow the development of a utility corridor, but could require the maintenance of a forest buffer next to the river and streams, and require stringent erosion and sedimentation control measures to assure protection of water quality.

Non-point source pollutants include sediment, nutrients, pesticides, animal and human wastes, and other substances which enter rivers and streams as components of runoff and ground water flow. Efforts to clean up concentrated pollution from specific sites (point source) have been relatively effective. As a result, non-point source pollutants, which are typically dispersed in origin, have increased in relative importance and now account for more than 50 percent of the pollution in our nation's waters [20].

Non-point source pollution is generally controlled through land management strategies [2]."

The restoration or maintenance of the riparian forest buffer is one of the most important management tools available to maintain or improve water quality. "Streamside forests are crucial to the protection and enhancement of water resources of the (Allegheny River). They are extremely complex ecosystems that help provide optimum food and habitat for stream communities as well as being useful in mitigating or controlling non-point source pollution. Streamside forests can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater and in shading streams to optimize light and temperature conditions for aquatic plants and animals. Streamside forests also ameliorate the effects of some pesticides, and directly provide dissolved and particulate organic food needed to maintain high biological productivity and diversity in the associated stream [20]."

Suspended sediments can adversely affect the growth and reproduction of beneficial aquatic plants by reducing or blocking the penetration of sunlight. Deposited sediments can interfere with the feeding and reproduction of bottom-dwelling fish and aquatic insects, which can weaken the food chain.



TYPICAL CROSS SECTION
ALLEGHENY RIVER RIPARIAN AREA

FIGURE A

The riparian forest buffer area adjacent to the riparian zone (see Figure A, page F-6) should have vegetation comprised of riparian trees and shrubs suitable to the site, with emphasis on native species. Species suitability information should be developed in consultation with county, state and federal agencies such as the County Conservation District, DER Bureau of Forestry or the Natural Resource Conservation Service. Periodic harvesting and timber stand improvement are appropriate to maintain vigorous stand growth and leaf litter replacement and to remove nutrients and pollutants which may be sequestered in the form of wood in tree boles and large branches; healthy streamside forests are especially important where runoff from agricultural lands and residential lawns contain fertilizer.

The riparian buffer should be designed to encourage sheet flow and infiltration and to impede concentrated flow. The buffer can be divided into three zones.

The purpose of Zone 1 is to create a stable ecosystem adjacent to the water's edge, provide soil/water contact area to facilitate the nutrient buffering process, provide shade to moderate and stabilize water temperature encouraging the production of beneficial algal forms and to contribute necessary detritus and large woody debris to the riparian ecosystem. Livestock should be excluded from Zone 1 except for designated stream crossings.

The purpose of zone 2 is to provide necessary contact time and carbon energy source for buffering processes to take place and to provide for long-term sequestering of nutrients in the form of forest trees. Subsurface drain out flow should be converted to sheet flow for treatment by the riparian forest buffer or treated elsewhere in the system prior to entering the surface water. Livestock should be excluded from Zone 2 except for necessary designed stream crossings.

Zone 3 is especially important and unique to agricultural practices adjacent to waterways. The purpose of Zone 3 is to provide sediment filtering, nutrient uptake and space necessary to convert concentrated flow to uniform, shallow, sheet flow through the use of techniques such as grading, and shaping, and devices such as diversions, basins and level lip spreaders. Additional width may be desirable to accommodate land shaping and mowing machinery. Grazed or ungrazed grassland may meet the purpose and requirements of Zone 3. Vegetation should be composed of dense grasses and forbes for structure stabilization, sediment control and nutrient uptake. The vegetative growth should be hayed, grazed or otherwise removed from Zone 3. Mowing and removal of clippings is necessary to recycle sequestered nutrients, promote vigorous sod and control weed growth. Zone 3 may be used for controlled intensive grazing when conditions are such that earthen water control structures will not be damaged. Periodic reshaping of earth structures, removal or grading of accumulated sediment and reestablishment of vegetation to maintain effectiveness of the riparian buffer may be necessary. (USDA, Forest Service. 1992.. Riparian Forest Buffers).

Residential development in the riparian forest buffer is possible if care is taken to maintain the physical characteristics of the streamside forest such as: 1) a forest canopy that provides leaf litter and shade and 2) a layer of shrub vegetation. Ideally, there should be no areas of extensive lawn as grass cover does not provide the buffering effect of forest leaf litter and also does not slow stormwater runoff. Selective thinning and pruning can be used as effective tools however to maintain a healthy streamside forest while providing a framed view of the watercourse from adjacent development.

In addition to protecting and enhancing water quality and biological diversity, streamside forests, as greenways, can play an important role in increasing a community's quality of life [19]. Studies have shown that real property values can be increased through the protection of greenways, including forest buffers along rivers and streams, when integrated with shoreline development [19]. The intrinsic value of promoting an organized, efficient pattern of rural development as well as conserving natural forest and recreational resources is recognized in current county ordinances along the designated river corridor [see existing zoning ordinances in effect within the designated river corridor, page F-9].

EXISTING LAWS

Numerous existing laws and regulations can be used to protect river values (See Appendix E - Interim Guidelines). These Interim Guidelines were developed to provide management protection of the Allegheny Wild and Scenic River until such time as the "Allegheny River Management Plan" is adopted. They include those laws which most directly and commonly applicable to the designated segments of the Allegheny River and can be used by municipal officials and the public in carrying out and managing activities on public as well as private lands.

Several factors hamper the effectiveness of these existing laws and regulations, including:

- 1) It is essential that local officials and the public be aware of the existence and scope of these laws and how they can be used to protect river values. Before projects are initiated, an understanding of existing laws is necessary.

For example, when applying for a building permit on property adjacent to the river, land owners/developers need to be made aware of restrictions such as bank disturbance, filling in wetlands, building distances from waterways, etc.

- 2) Enforcement of existing laws and regulations is generally initiated by complaints registered by concerned citizens and property owners, and many infractions go unreported.
- 3) Enforcement of laws and regulations between districts may vary. For example, what may be deemed "adequate" erosion and sedimentation control on a timber harvesting project in one district may be less than what is required in an adjacent district. Compliance needs to be uniform and to a standard sufficient to protect resources.

Any new or proposed land management regulations (zoning ordinances, conservation districts, etc.) are intended to be in addition to existing laws and ordinances, and not a duplication.

Goal A: Provide for Planned and Orderly Development of Private Lands

Objective: Limit housing density and intensity of use with consideration for the existing character of the river.

Municipalities can establish special zoning districts for the river corridor, river conservation zones, or river overlay zones. Within these zones, minimum densities can be established for residential and non-residential development, based on soils, topography, visual character of the river, etc.

See references: 2, 15-18 & 20.

Goal B: Maintain the existing high water-quality found in the Allegheny River

Objective 1: Reduce non-point source pollution through the maintenance of riparian forest buffers (streamside forests).

The simplest method to meet this objective is for municipalities to develop some type of regulation establishing a buffer zone a specific distance from the ordinary high water mark (OHWM) or streambank. Within that buffer zone, restrictions may be placed on management practices, dredging, filling, development, waste disposal and other potential causes of degradation. The primary objective is to create a zone where vegetation is relatively undisturbed. The main advantage of a "fixed" buffer width is the ease with which it is understood by the landowner and administered by a municipality. The disadvantage is that a standard buffer may include too much or too little of the riparian area which needs to be buffered.

Another approach would be to establish individual riparian buffer zones using predetermined standards based on slope, soils, vegetative cover, and wetlands. This approach provides the flexibility to address local conditions and meet local needs. This method, however, is not as easily applied or administered as would be a fixed width buffer.

A review of publications (pp.F-15 and F-16) on river protection identified ordinances and guidelines which include maintaining natural vegetative buffer zones along riverbanks ranging from 75 to 200 feet in width (see especially, references: 11, 14, 16, 17, 20, 23 & 24).

Objective 2: Protect special erosion hazard areas on steep slopes.

Potential problems caused by development on steep slopes (generally considered greater than 15 %, a 15-foot rise for 100 feet of length) can include erosion, stream siltation, landslides or unsanitary conditions. Development on steep slopes should protect and be compatible with the natural resources of a site. Regulations can prevent inappropriate clearing, grading and development of steep slopes.

Steep slope "districts" can be established in which certain uses are prohibited on slopes of 15 percent or greater.

Examples of some prohibited uses include:

- Freestanding structures, buildings and retaining walls, unless no alternative location is feasible;
- Roads, driveways and parking facilities, unless no alternative alignment or location is available;
- The filling or removal of topsoil except when related to an activity approved by special exception;

- Swimming pools; and
- Dumps, junkyards or other outdoor storage of vehicles and materials.

To prevent inappropriate and potentially-damaging development on steep slopes, municipalities can also require:

- Review and approval of erosion and sedimentation control plans for all earth-moving activities on slopes of 15 percent or more;
- Conditional or special use review proposed projects or a professional engineer's plan for projects involving slopes over 15 percent in grade;
- A larger lot size on steep slopes.
- A limit on the amount of development on steep-slope lots (i.e., buildings, covering with an impervious surface, regrading or stripping of vegetation).

See references: 6-9, 11, 14 & 23.

Objective 3: Protect special erosion hazard areas on ridges.

Development along ridgetops presents problems similar to development on steep slopes, and similar regulations could apply. Municipalities could also require:

- That no structure be erected within ridgeline erosion hazard areas, as mapped by the municipality;
- Conditional or special use review of principal structures within a specified distance of the ridgeline.

A review of model land-use regulations shows a range of 40 to 100 feet as the most commonly used setback distance from a ridgeline (see references 16 & 17).

Objective 4: Protect water quality from septic system pollution.

Flowing water is most easily protected from septic pollution by adherence to existing laws and required setback distances.

A review of existing land-use regulations along waterways [NPS] indicates setbacks of 75 to 100 feet are the most common (see references: 15, 16, 20, 23 & 24).

Objective 5: Reduce pollution threats from solid and toxic waste disposal

New solid waste disposal sites, including low or high level radioactive or toxic wastes, should be located outside of the designated river corridor. Developers should provide evidence of an approved solid waste disposal method, such as a contract with an approved hauler, for any proposed project.

Where it is permitted, the burning of household refuse/trash should be done in an enclosed container away from the river or stream bank (outside of the riparian buffer). The proper disposal of burned refuse should also be required.

By prohibiting the use of inappropriate material for bank stabilization (roofing shingles, appliances, tires, etc.), municipalities can reduce possible pollution hazards in the river corridor.

Goal C: Protect the health, safety, and welfare of residents and visitors to the corridor and also provide for the protection and enhancement of the natural resources including scenic values.

Objective 1: Maintain an uncluttered landscape.

This objective can be met by requiring minimum lot dimensions, building densities, building setbacks, and building heights that would be compatible with maintaining the current character of the river.

The use of "cluster" development would also meet this objective. Cluster ordinances allow developers to build at greater densities than would normally be permitted by local zoning ordinances, providing common open space is reserved in riparian zones, areas with sensitive soils, critical wildlife habitat and critical visual zones. An additional benefit of clustering is lower infrastructure costs to developers by reducing the lengths of roads and utilities line.

From the Maryland Office of Planning (1990): "Assuming a gross density of one dwelling per five acres, and soil conditions suitable for individual on-lot septic disposal systems, approximately \$3,500 in site development costs could be saved for each five-acre lot that is allowed to be down-sized to one acre. For example, if four additional dwellings were allowed on a five-acre parcel (producing a net density of one dwelling per acre), \$14,000 could be saved in site costs, and 20 acres of open space could be protected permanently on the remaining land (Aren't, 1990)."

Riverfront towns and municipalities should consider establishing subdivision regulations or revise existing regulations to require that riverfront subdivisions specifically set aside riparian areas as protected open space.

An uncluttered landscape can also be maintained by prohibiting the construction of camps and cottages from unsuitable materials. Inappropriate construction or materials can include, but are not limited to, bodies of old buses and freight trailers and transient travel trailers affixed to permanent locations.

Landowners can be required to remove junk automobiles, abandoned and/or uninhabitable trailers, camps or other buildings within the river corridor.

See references 6, 7, 9, 14, and 25 for additional information on open space, zoning for stream corridor management, and cluster and subdivision development.

Objective 2: Prevent unnecessary sign clutter, particularly along the river front, by limiting off-premises advertising signs.

The main objective of sign ordinances is to prevent an overabundance of signs of substantially different size and character along the river.

Ordinances controlling the type, size and density of signs within the corridor can help maintain the visual character of the river. Sign ordinances can: limit off-premises signs to those needed for public information; limit the size of signs; make advertising signs conditional or special uses with design standards requiring that they harmonize with the surrounding landscape; and prevent the use of flashing, oscillating or illuminated signs within the river corridor.

Some examples of signs which may be excluded from limitations except for recommended maximum size include signs relating to: 1) public information, safety, home occupations and announcements, 2) professional services offered on-site by the landowner 3) short-term information (i.e., farm produce, political advertising, construction and for sale/for rent signs), and 4) signs limiting access to private property,

See references: 2, 15, 16, 20 & 25.

Goal D: Provide for recreational uses while protecting the Allegheny River as a natural resource.

Objective: Adopt standards regarding development, operation and maintenance of recreational facilities to limit adverse impacts on adjacent landowners and the environment.

Recreational facilities should 1) be designed so that they are compatible with the current character of the river, 2) be sensitive to adjacent landowners, and 3) protect the environment.

Maintaining the riparian forest buffer when designing a recreational facility is important. It helps prevent erosion, maintains the visual landscape, and can buffer noise reaching the river. Requiring a setback from the riverbank can accomplish this.

Requiring a forested buffer between recreational developments and adjacent properties would provide a visual screen and decrease noise impacts from developments. Buffers could be natural or planted.

Minimum acreages and densities should be established for recreational facilities. Densities would be different for campgrounds and vehicle parks, with a larger minimum area being required for a vehicle park. (Cranberry Township, Venango County Subdivision and Land Development Plan, and the Warren County Zoning Ordinance already require a minimum of five acres for the establishment of a campground for transient trailers and recreational vehicles.)

Long-term or permanent occupancy of any recreation site should be prohibited.

As part of the permitting process, a site-plan review should be required. Information concerning parking, access, sanitary facilities, trash disposal, etc., should be provided.

EXISTING ZONING ORDINANCES WITHIN THE PROPOSED RIVER CORRIDOR

None of the existing zoning ordinances specifically addresses river conservation needs.

MUNICIPALITY	LOT SETBACKS*	LOT SIZE	STEEP SLOPES	BUILDING HEIGHT	SIGNING	RECREATION DEVELOPMENT
Cranberry Twp. (Agriculture/ Conservation)	* 50' front * 50' rear	* 2 acres * 200' lot width			* up to 300 sq ft	* minimum 5 acres for transient trailer camping
Complanter Twp. (Conservation) (R-1 Oleopolis)	* 40' front * 50' rear *	(C) 2 acres; 200' lot width * (R-1) 1 acre; 150' lot width	* engineering plan if over 15%	* (C) 45' * (R-1) 35'	* up to 300 sq ft	* prohibits camp/cottage construction from unsuitable materials (i.e., busses, freighters & transient trailers)
Sandy Creek Twp. (Conservation)	* 50' front * 50' rear	* 1.5 acres * 200' lot width	* engineering plan if over 5%	* 55'		
Venango County Subdivision & Land Development Plan		* 1/2 acre * 125' minimum width				* 5 acres for recreational vehicle park
Warren County adopted by: Mead, Glade, Pleasant Twps., Tidoute Borough (Agriculture/ Conservation/ Recreation (ARC) Districts)	* 50' front * 50' rear	* 40,000 sq ft minimum * (R-1) 20,000 sq ft (no public water or sewer)		* front, side yards must increase as height exceeds 30'	* up to 32 sq ft * 96 sq ft for community sign	* 5 acres for resort development

* There are currently no established setbacks from watercourses or river and streambanks.

SAMPLE REGULATIONS

Listed below are examples of how three municipalities have approached river protection through regulation. While the objectives of these examples are similar (and are also similar to the goals and objectives of this appendix), each has designed ordinances which protect river resources while meeting the particular needs of their community.

Excerpted from Model Shoreline Regulations for the Battenkill, Prepared by E. Sahr for Vermont Natural Resources Council, August 1989.

RIVER PROTECTION REGULATIONS

1.1 Purposes

The purpose of these river protection regulations is to promote and protect the public, health, welfare and safety, and to protect economic property values, aesthetic and recreational values, and to provide for the proper utilization of natural areas, the environment, and natural resources. These regulations are designed to preserve nature from disposilage and harm resulting from the unrestricted activities of humans.

1.1.1 The further goal of the (Town Name) River protection regulations are to:

- A. Promote the preservation of the scenic qualities of the natural landscape along the Battenkill;
- B. Prevent any disruption to the natural flow of the river;
- C. Protect fish and wildlife habitat within and along the river;
- D. Control erosion and siltation;
- E. Enhance and preserve existing agricultural lands, adjacent wetlands, and other environmentally sensitive areas along the shoreline;
- F. Conserve shore cover and encourage new developments to be designed in a way that will result in minimal disturbance to the riparian environment.

1.2 Jurisdiction

These regulations apply to the Battenkill River and adjacent wetlands within the jurisdiction of the (Town Name), its shores and landward up to 200 feet from each bank. All distances shall be measured in horizontal feet.

The (Town Name) River Protection regulations is an overlay district and shall be superimposed on the other districts established by this bylaw. All regulations of the (Town Name) Zoning Bylaw applicable to such underlying districts shall remain in effect, except that when these Regulations impose a greater degree of control, in such case these regulations shall prevail.

1.4 Regulations

In the case of the shoreline of the Battenkill and its associated adjacent wetlands, the following restrictions shall apply:

1.4.1 Cutting Restrictions

The purpose of regulating tree cutting and land clearing is to protect scenic beauty, control erosion and reduce effluent and nutrient flow from the shoreline.

These provisions shall not apply to the removal of dead, diseased or dying trees or to other vegetation that in the opinion of the Zoning Administrator present safety or health hazards.

In the case of the shoreline of the Battenkill and its adjacent wetlands, the removal of vegetation, including trees, shall be permitted on frontage lots provided the following standards are met:

- A. Within 35 feet extending inland from all points along the high water mark no vegetation may be removed. This area shall be maintained as an undisturbed natural buffer strip.
- B. The exception of this standard will be an allowance for river access. The creation of a contiguous clear-cut opening in the buffer strip shall not exceed ten (10%) percent or 20 feet, whichever is less, of the shoreline frontage on any individual lot. The clear-cut should be sited on the lot so as to allow for a view and access but reduce run-off. The pathway created should be effective in controlling erosion.

1.4.2 Where a shoreline lot owner violates the shoreline cutting restriction of 1.3.1, the Zoning Administrator shall

require trees of reasonable diameter in size to be planted so as to create a buffer strip area which is in compliance with this section. A vegetative recommendation can be made by the Soils Conservation Service, if requested by the Zoning Administrator. This provision shall be in addition to any and all penalties contained in this bylaw.

1.4.3 Minimum Water Frontage

The minimum lot water frontage measured along the shoreline, as it meanders, for each residential or principal building shall be 200 feet.

1.4.4 Sewage Facilities/Septic Systems

All sewage facilities and septic systems shall comply with the (Town Name) Health Ordinance. A buffer strip of at least 150 feet shall be maintained between any portion of the septic system/sewage facility and the main high water mark.

1.5.5 Alteration to the Shoreline

Alteration to the shoreline shall be prohibited. Nothing in this section shall prohibit riprap.

1.5 River Protection Standards

All land uses, including all residences developed either on frontage lots or within a cluster development, shall comply with the following:

1.5.1 A buffer strip extending at least one hundred (100) feet in depth, to be measured landward from each bank on the Battenkill shall be required for all lots within the River Protection District. If any lot, existing at the time of adoption of this bylaw, does not contain sufficient depth, measured landward from the riverbank, to provide a one hundred (100) foot buffer strip, the buffer strip may be reduced to 50% of the available lot depth, measured landward from the riverbank.

A. The buffer strip shall be retained in a natural and scenic condition. The vegetation clearing restrictions of 1.3.1. shall apply; clearing may occur on no more than 50% of the remainder of the buffer strip, subject to all applicable regulations in this section.

B. No buildings or structures shall be erected, enlarged, altered or moved within the buffer strip, unless a building is destroyed by accident or natural causes, in which case, it may be replaced to its original condition.

C. On-site disposal systems shall be located as far from the Battenkill as feasible.

1.5.2 All new development shall be blended into the existing landscape on the property so as to minimize its visual impact and maintain natural beauty and environmentally sensitive shoreline areas through the use of vegetative and structural screening, landscaping, grading, and appropriate location of structures on the lot.

1.5.3 Run-off from new development shall be directed toward areas covered with vegetation for surface infiltration catch basins, and piped storm sewers shall be used only where other methods are infeasible.

1.6 Permitted Uses

Only the following uses will be permitted within the River Protection District provided they are not prohibited by any other section of this zoning bylaw, and that they conform to the River Protection Standards in Section 1.4.

1.6.1 Agricultural production, including raising of crops, livestock, poultry, nurseries, orchards, and hay, provided that a buffer strip of fifty (50) feet be maintained between the area of use and the high water mark; provided however, that the minimum width of this strip shall be increased to prevent the run-off of any materials containing waste or other chemical by-product resulting from the agricultural use.

A. A fifty (50) foot strip of permanent vegetation shall be maintained from the high water mark, or a twenty-five (25) foot strip from the highest known water level, whichever distance is greater.

Livestock shall be allowed controlled access to the banks of the river so as to prevent erosion and damage to the banks.

1.6.2 Recreation uses, provided there is minimal disruption of wildlife habitat;

1.6.3 Residential Uses:

A. Lawns, gardens, and similar open space uses, provided the required buffer strip of natural vegetation is

- maintained.
- B. Structures designed for human occupancy and requiring disposal of sanitary wastes provided that all applicable environmental protection standards, and all standards contained in this bylaw are fully complied with.

1.6.4 Maintenance and repair usual and necessary for the continuance of an existing use;

1.6.5 Conservation of water, plants, and wildlife.

1.7 Prohibited Uses

- 1.7.1 The storage or processing of materials that are pollutants, flammable, poisonous, or explosive, or could be injurious to human, animal and fish and aquatic life.
- 1.7.2 Garbage and waste disposal facilities including any further encroachment toward the shoreline of existing sites.
- 1.7.3 No removal or dredging of riverine materials is permitted, except as allowed by the State of Vermont.
- 1.7.4 No clear-cutting of existing vegetation as outlined in Section 1.3.1. (Cutting) of this section.
- 1.7.5 Sanitary landfills or other solid waste disposal facilities.
- 1.7.6 Automobile junk or salvage yards.
- 1.7.7 Underground fuel storage tanks.
- 1.7.8 Storage for resale of heating fuels, including but not limited to, oil, gas and coal.
- 1.7.9 Mining of land, removal of sand and gravel, and quarrying of raw materials.
- 1.7.10 Open storage of road salt or other de-icing chemicals.
- 1.7.11 Disposal of snow which has been brought in from outside the district.
- 1.7.12 Gasoline stations, car washes, auto repair or auto body shops.
- 1.7.13 Commercial metal plating, finishing and polishing.
- 1.7.14 Chemical, medical, and bacteriological laboratories or manufacturing facilities.
- 1.7.15 Dry cleaning establishments and laundromats.
- 1.7.16 Manufacturing facilities which produce any of the following: electrical equipment, pharmaceuticals, plastic, fiberglass, rubber goods and textiles.
- 1.7.17 Commercial food processing, photographic processing, or wood processing facilities.
- 1.7.18 Printing establishments.
- 1.7.19 Concrete plants.
- 1.7.20 Furniture stripping establishments.
- 1.7.21 Machine shops.
- 1.7.22 Any other uses that involve, as the principal activity, the generation, storage, use, treatment, transportation, or disposal of hazardous materials.
- 1.7.23 Pesticide, herbicide, and fungicide applications, with the exception of those reviewed and approved by the Department of Health.
- 1.7.24 All other uses not specifically permitted or allowed within the protection district are prohibited, unless the Zoning Board determines that the use does not threaten the biological integrity of the Battenkill and adjacent wetlands.

1.8 Conditional Uses

Uses in this section are permitted only upon application to the Zoning Administrator and upon issuance of a conditional use permit by the Zoning Board of Adjustment as provided by this bylaw.

- 1.8.1 Boat rentals.
- 1.8.2 Railroads, roads.
- 1.8.3 Cluster development.
- 1.8.4 Commercial development.
- 1.8.5 Industrial development.

TOWN OF COLONIE (NEW YORK) WATERCOURSE PROTECTION

Purpose.

The purpose of these standards is to encourage planning and development of natural and man-made watercourses and adjacent lands in the Town of Colonie in ways which will restore, protect and enhance the recreational and visual amenities; preserve and protect surface water carrying capacity; maintain surface absorption and water retention capabilities of adjacent land thereby minimizing sedimentation and erosion due to rapid runoff; to protect upstream and downstream land from increased potential for periodic excessive flooding due to removal of riparian vegetation, dredging, filling, damming or channelization; to prevent degradation or loss of stream related wetlands; to maintain the stream or waterway free from litter, trash and other debris; and to control adjacent activities that will cause organic or chemical pollution to such watercourses.

Regulated Watercourse Areas.

These watercourse protection standards are applicable to those streams which are delineated on the Conservation Advisory Council's "Natural Surface Drainage Map" and to all adjacent areas lying within one hundred feet (100') measured horizontally from the center line of the stream in each direction.

Said map is on file at the Town Clerk's Office and copies are available for reference at the Town of Colonie Engineering and Planning Services Department and the Town of Colonie Building Department.

Prohibited Activities.

The following activities shall be prohibited within the regulated watercourse areas:

1. The installation of any septic tank, leach field or other on-site sewage disposal facility.
2. The storage or dumping of any waste material, junk, refuse or other debris.
3. Substantial clearing or grading, or any building construction.
4. The piping of streams.

Activities subject to permit:

The following activities shall require the issuance of a permit:

1. The alteration of any existing building or structure within the regulated area.
2. Culverts and bridges.
3. Discharges.

Exempt Activities.

The following activities shall, to the extent provided, be exempt from these permits requirements:

1. Active agricultural activities.
2. Watercourse maintenance activities, if carried out in accordance with applicable New York State DEC standards and requirements.

3. The following activities related to the necessary normal maintenance and upkeep of property:

- (a) Lawn care
- (b) Gardening
- (c) Tree and shrub care
- (d) Removal of dead and deteriorating vegetation
- (e) Removal of structures
- (f) Repair of structures
- (g) Repair of faulty or deteriorating sewage facilities
- (h) Reconstruction of structures damaged by a natural disaster.

DAMASCUS TOWNSHIP
Zoning Ordinance
Wayne County, Pennsylvania

Article V - Schedule of Uses

District - Names and Intent:

501 - R-D-River District: This district is intended to conform to the requirements of the National Wild and Scenic River Act and the regulations developed by the U.S. Park Service, the managing agency for the river corridor; i.e. to allow for the enjoyment of the Delaware River Valley by providing for housing, agriculture pursuits, river-related recreation and other activities in harmony with the intent of the Act.

Principal Permitted Uses:

1. Agriculture in all its forms, except intensive livestock operations; 2. Single family dwellings, not including mobile homes; 3. Non-commercial canoeing, camping; 4. Selective lumbering; 5. Nature trails.

Conditional Uses:

1. Public or semi-public recreation related to river use; 2. Access sites and convenience buildings; 3. Non-operational uses and buildings catering to the needs of recreators, including, but no limited to, bait and tackle shops, snack bars or equipment sales; 4. Mobile homes on permanent foundations.

Special Exceptions:

None.

Accessory Uses and Buildings:

1. Any agriculture buildings; 2. Swimming pools; 3. Residential accessory buildings limited to 2 in number and total of 1,500 sq. ft. in area per minimum sized lot; with 1 additional building & 500 sq. ft. floor area per each additional 2 acres.

Development Standards:

See Section 601.

Article VI - Development Standards

601 - R-D River District:

601.1 - Lot Size; Frontages - Minimum lot size in this district shall be two

(2) acres. Minimum river frontage shall be two hundred (200) feet. Minimum road frontage shall be two hundred (200) feet, except under the following conditions: Where the curvature of the river or other configuration of river and road would result in unreasonable reducing lot yield, road frontage may be reduced to one hundred (100) feet, provided that river frontage is increased so as to yield lots with average width of two hundred (200) feet, and further provided that the lot retains a minimum of two (2) acres. In no case shall river frontage be less than two hundred (200) feet.

601.2 - Setback and Yard Requirements - Minimum setback line of any building

shall be fifty (50) feet from inside line of public right of way and forty (40) feet from side or rear property lines. Minimum distance from normal water mark to any building or sanitary property lines. Minimum distance from normal water mark to any building or sanitary installation shall be one hundred (100) feet.

601.3 - Building Height - Maximum building height shall be thirty-five (35) feet. Agriculture silos shall be exempt from this limitation.

601.4 - Lot Clearance - Lot clearance for buildings, driveways, swimming pools, parking areas or other installations interfering with run-off absorption shall not exceed ten percent (10%) of total area.

601.5 - Limited Use - This district may contain Limited Use areas as defined in Section 605. Wherever and whenever this occurs, consult Section 605.2 and 605.3.

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APPENDIX I

HERITAGE RESOURCE PROTECTION METHODS

APPENDIX I

HERITAGE RESOURCE PROTECTION METHODS

One of the important objectives in the river management plan is to protect, enhance, and interpret cultural and historic resources in the corridor. These resources, referred to as heritage resources, include the physical remains of sites, structures, or objects used by humans in the past. Heritage resources may be historic, prehistoric, archaeological, or architectural in nature and may, in some cases, be grouped into districts on the basis of shared characteristics.

The values of heritage resources are in the story they tell about former lifeways, human adaptations to different environments, cultural diversity through time and space, and human behavior in general. This story may be embodied in architectural style, engineering feats, tool types, location with respect to natural resources; or it may relate to an historic event that happened, or a person of historical importance. Sometimes the values are immediately apparent, as with a work of rock art (e.g., Indian God Rock) or a building of unique design or craftsmanship (e.g., the Allegheny River Hotel). More often the values can only be assessed by doing research on the resource or in documents pertaining to it, as with an archaeological site or the location of an historic event. Keys to heritage resource values may also be found in the recollections of individuals who experienced past events or lifeways (e.g., the logging industry, the petroleum industry, etc.). Heritage resource values may be aesthetic, scientific, interpretive, or utilitarian and often depend on the integrity of the resource or its surroundings.

Heritage resource protection, enhancement, and interpretation all depends upon balancing heritage resource values, the interests of the public to know about the past, the legal rights of landowners, and community values and goals.

With regard to heritage resources on nonfederally owned land, the Allegheny National Forest will provide maximum encouragement to organizations and individuals undertaking preservation by private means; encourage the public and private preservation and utilization of all usable elements of the historic built environment, and assist State and local governments to expand and accelerate their historic preservation programs, archaeological site stewardship programs, and other heritage resource identification, evaluation, enhancement, and interpretation activities.

Although a number of heritage resource investigations (including archaeological studies and historic preservation efforts) have been conducted in the designated river corridor, none have been undertaken from a comprehensive, systematic, and region-wide basis. Despite this fact, a number of archaeological sites have been sporadically recorded in the corridor with the Pennsylvania Archaeological Site Survey (PASS) and historic structures and buildings with the PHMC's Historic Resources Survey Form. However, with regard to the former, information on most of the previously recorded sites is sketchy at best and with a number of the sites the information (e.g., on condition and integrity) has not been updated in several decades. With this in mind, it is important to verify and document the previously recorded sites within the corridor to determine whether they are still present and, if so, what is their present condition and if there are any perceived future threats to their integrity.

Non-regulatory techniques can be used to protect heritage resources on private lands within the corridor. A voluntary stewardship program (such as been proposed and endorsed by the Pennsylvania Archaeological Council) can help build a preservation ethic and a sense of community responsibility and pride in the corridor's heritage. Such a program can also offer opportunities for the public to learn about archaeology and get involved in heritage resource activities. Long-term management programs can strengthen protection measures.

Promoting the compatibility of land use with archaeological site protection and historic preservation through local ordinance and development processes and by incorporating archaeology in local ordinances are important techniques that can be used in the corridor on regulating uses and activities on private lands that contain significant archaeological sites or historic buildings or structures. To underline their effectiveness a local ordinance should stipulate that appropriate professional standards be followed.

Heritage resources within the corridor are should be evaluated in order to identify which resources may be eligible for inclusion on the National Register of Historic Places. Registration of those that are eligible but are not presently on the National Register should be encouraged and pursued (such as with the crib dam in Tionesta).

Those that are on the National Register, or determined eligible for inclusion, should have long-term management plans developed for their protection, enhancement, and/or interpretation. These include National Register sites such as Indian God Rock and the Rockland Furnace.

The following table is a summary of protection strategies for protecting heritage resources. it is a modified version of that presented in *Tools and Strategies: Protecting the Landscape and Shaping Growth*, prepared by the Regional Plan Association, The Trust for Public Land, and the Recreation Resources assistance Division of the National Park Service, Washington, D.C., 1990 (Susan Henry. 1993. Protecting Archaeological Sites of Private Lands. USDI, National Park Service, Preservation Planning Branch, Interagency Resources Division).

Many of the methods described in this table are applicable to conserving other resources.

SUMMARY OF PROTECTION STRATEGIES

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
GOVERNMENT OWNERSHIP OPTIONS			
FEDERAL	Acquisition by National Park Service, Forest Service, U.S. Fish and Wildlife Service, Bureau of Land Management	Acquisition at federal level eliminates financial obligation for locality. Federal law and regulations require management practices sensitive to resources.	Acquisitions are limited due to agencies' specific criteria for acquisition. Needs congressional authorization. May remove land from tax base. Site protection and agency primary mission may come into conflict.
STATE	Acquisition by state parks, natural resource or conservation, environmental protection, or historic preservation agency.	Statewide bond acts can provide significant funding for important land acquisitions throughout a state. Provides revolving loan funds to leverage nonprofit activity. If state laws exist, sensitive resource management is required.	Government may miss acquisition opportunities due to long time frame for acquisition approvals. May remove land from tax base. May not be required to manage for protection.
LOCAL	Acquisition by county or municipality.	Local government can be more flexible about type of land it acquires. May or may not be required to manage resources sensitively.	Limited local funds and expertise limit the number of acquisitions. May remove land from tax base. May not be required to manage sites for protection.
NONPROFIT PURCHASE AND OWNERSHIP OPTIONS			
ACQUISITION & MANAGEMENT	A national, regional, or local nonprofit or land trust retains ownership and assumes management responsibilities.	Offers greatest control for site protection. Local nonprofit allows for ownership within the community; local citizens can provide responsible care and management of the site.	Land must fit criteria of acquiring organization. It must be prepared to assume long-term management responsibilities and costs.
ACQUISITION & SALEBACK OR LEASEBACK	A nonprofit can purchase property, limit future development through restrictive easements or covenants, and resell or lease back part or all of property. May involve subdivision of property.	Acquisition is financed by resale or leaseback. Resale at less than fair market value (because of restrictions) makes land affordable for buyer. Sale can finance preservation of part of property.	Complex negotiations. A leaseback means the nonprofit retains responsibility for the land.
ACQUISITION & CONVEYANCE TO PUBLIC AGENCY	A nonprofit can help to implement government programs by acquiring and holding land until a public agency is able to purchase.	A nonprofit can enter the real estate market more easily than a government, and can often sell to government at under fair market value if property was acquired through a bargain sale.	Must have a public agency willing and able to buy within a reasonable amount of time.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
OWNERSHIP OPTIONS			
FEE SIMPLE	Outright purchase to full title to land and all rights associated with it.	Owner has full control of land. Allows for permanent protection.	Acquisition can be costly. May remove land from tax base if government acquires. Ownership responsibility includes liability and insurance.
EASEMENT	A partial interest in property transferred to an appropriate governmental entity either by gift or purchase. As ownership changes, the land remains subject to the easement restrictions.	Less expensive for purchasers than fee simple. Landowner retains ownership and property remains on tax rolls, often at a lower rate, because of restricted use. Easement may allow for some development. Potential for income and estate tax benefits from donation.	Easement must be enforced. Restricted use may lower resale value.
FEE SIMPLE & LEASEBACK	Purchase of full title and lease back to previous owner or another, subject to restrictions.	Allows for comprehensive preservation program. Income through leaseback. Liability and management responsibilities assigned to lessee.	Land must be appropriate for leaseback (e.g., agricultural land).
LEASE	Short- or long-term rental of land.	Low cost for use of land. Landowner receives income and retains control of property.	Lease does not provide equity and affords only limited control of property. Temporary nature of lease does not assure permanent protection.
UNDIVIDED INTEREST	Ownership is split between different owners, with each fractional interest extending over the whole parcel. Each owner has equal rights to the entire property.	Prevents one owner from acting without the consent of the other(s).	Several landowners can complicate property management issues, especially over payment of taxes.
TRANSFER OF TITLE OPTIONS			
FAIR MARKET VALUE SALE	Land is sold at a price equivalent to its value at highest and best use.	Highest sale income (cash flow) to seller.	Can be expensive to acquire.
BARGAIN SALE	Part donation, part sale. Property is sold at less than fair market value.	Tax benefits to seller since difference between fair market value and sale price may be considered a charitable contribution. Smaller capital gains tax.	Seller must be willing to sell at less than fair market value. Bargain sale price may be high.
OUTRIGHT DONATION	A donation by landowner of all or partial interest in property.	Allows for permanent protection without direct public expenditure. Tax benefits to seller since property's fair market value may be considered a charitable contribution.	A receiving agency must be willing to accept donation, and capable of management responsibilities.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
TRANSFER OF TITLE OPTIONS cont.			
OTHER DONATION	By devise: Landowner retains ownership until death. Reserved Life Estate: Landowner donates during lifetime but has lifetime use.	Management responsibility for acquiring entity often deferred until donor's death. Heirs can benefit from reduction in estate taxes. In a Reserved Life Estate, landowner retains use but receives tax benefits from donation.	Date of acquisition is uncertain with either option. In By Devise, donor does not benefit from income tax deductions.
LAND EXCHANGE	Public agencies or nonprofits can exchange developable land for land with high conservation value.	Relatively cost-free technique if trade parcel is donated. Reduces capital gains tax for original owner of protected land.	Property owner must be willing to accept exchange. Property must be of comparable value. Complicated and time-consuming transaction.
EMINENT DOMAIN (GOVERNMENT)	The right of the government to take private property for public purpose upon payment of just compensation.	Provides government with a tool to acquire desired properties if other acquisition techniques are not workable.	High acquisition costs. Can result in speculation on target properties. Potentially expensive and time-consuming litigation.
AGENCY TRANSFER (GOVERNMENT)	Certain government agencies may have surplus property inappropriate for their need which could be transferred to another agency for their use.	Agency transfer eliminates the need for any expenditure on acquisition.	Surplus property available may not be appropriate for use or the owning agency may want to sell to a private party to generate revenues.
RESTRICTED AUCTION (NON-PROFIT)	Government can restrict the future use of their sale property to open space.	Property still sold to highest bidder but restriction lowers price and competition.	It may be difficult for a nonprofit to convince government that a restriction will serve to benefit the general public. Purchase price may still be expensive.
NONPROFIT FINANCING OPTIONS			
INSTITUTIONAL LENDER	Conventional loan from bank or savings and loan.	Less time-consuming process than fundraising.	Long-term financial commitment for nonprofit. Higher interest costs than owner financing. Mortgage lien.
INSTALLMENT SALE	Allows buyer to pay for property over time.	If seller-financed, can lower taxes for seller. Buyer can negotiate better terms or lower interest rates.	Long-term financial commitment for nonprofit.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
NONPROFIT FINANCING OPTIONS cont.			
FUNDRAISING	Through foundations, corporations, and local community. Program-related investments (foundations), non-standard investments (corporations), or charitable creditors (community) can provide no- or low-interest loans for acquisition.	Fundraising creates publicity and support throughout community.	Obtaining grants and contributions is a long, uncertain and time-consuming process.
REVOLVING FUND, LOANS OR GRANTS	A public or private organization makes grants to localities or nonprofits for land acquisition based on a project's revenue-generating potential.	Encourages projects with revenue-generating potential.	Since projects with lower revenue-generating potential have lower priority, may have limited use for preserving archaeological sites in place.
PARTIAL DEVELOPMENT, SALE-BACK OR LEASE	A nonprofit can purchase property, limit specific land uses or future development through restrictive covenants, and resell or lease back part or all of the property.	Acquisition is financed by resale or leaseback. Resale at less than fair market value (because of restrictions) makes land affordable for buyer. Sale can finance preservation of part of property.	Complex negotiations. If leaseback, nonprofit retains responsibility for land. Finding a buyer for restricted property may be difficult.
GOVERNMENT FINANCING OPTIONS			
FEDERAL HISTORIC PRESERVATION FUND	Federal funds provided to states on a 60-40 matching basis to fund grants for the identification, evaluation, registration and treatment of historic places. Administered by State Historic Preservation Offices, at least 10% of the state's allocation must go to Certified Local Governments.	Provides financial support to locate sites, nominate properties to the National Register of Historic Places, prepare preservation plans, and develop preservation strategies.	Funds rarely available for acquisition. Local communities must be able to match the grant funds.
FEDERAL LAND AND WATER CONSERVATION FUND	Federal funds are provided to states on a 50-50 matching basis for acquisition and development of outdoor recreation areas.	Cost of acquisition for local government is lowered by subsidy.	Receipt of funds is dependent upon federal approval. Limited funds available. Archaeological site protection goals may compete with recreation goals.
GENERAL FUND APPROPRIATION	Appropriation from general state or local government treasury.	Avoids interest and debt service cost.	Unpredictability of budget allocations. Might not provide sufficient funds to compete with other programs.
BOND ACT	Borrowing money through issuance of bonds is a common way to provide funds for open space. Usually approved through referendum on a local or statewide basis.	Availability of funds allows for immediate purchase of open space. Distributes cost of acquisition.	Requires approval of general public. Can be expensive: interest charges are tacked on to cost of project.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
GOVERNMENT FINANCING OPTIONS cont.			
STATE GRANTS, LOW INTEREST LOANS	Some states provide matching grants to or low interest loans for municipalities to acquire open space, greenways, and other land for preservation purposes.	State funding encourages localities to preserve important lands by leveraging limited local funds. Donated lands may be used as a match.	Localities must compete for limited funds and be able to match state funds.
REAL ESTATE TRANSFER TAX	Acquisition funds obtained from a tax on property transfers, which is a small percentage of purchase price. Percentage and amount exempted varies with locality.	Growth creates a substantial fund for land acquisition. Enables local communities to generate their own funds for land and resource protection, reducing reliance on scarce state funds.	Discriminates between new and existing residents. Can inflate real estate values. Works effectively only in growth situations.
PAYMENT IN LIEU OF DEDICATION	Local government requires developers to pay an impact fee to a municipal trust fund for acquisition of lands for public purpose, e.g., schools, parks, open space.	New construction pays for its impact on lands needed for public purpose.	Acquisition funds dependent upon development. May be lack of accountability for funds. Legality of method depends on relationship of development to public land needs.
DEVELOPMENT REGULATORY TECHNIQUES			
LARGE LOT ZONING	Large minimum lot sizes restrict the density of development.	An established land-use control used as part of a comprehensive plan. Effective at maintaining low densities and protecting water resources, particularly in rural areas.	Not an effective device for permanent preservation since zoning is subject to change. Can increase real estate values and infrastructure costs and can foster urban sprawl.
PERFORMANCE ZONING	A zone is defined by a list of permitted impacts (based on natural or historic resource data and design guidelines) instead of permitted uses.	Directs development in appropriate places based on a comprehensive conservation or preservation plan. May be implemented through cluster development. Greater flexibility in design compatibility with land.	Difficulties in implementation since impacts on historical and environmental resources can be hard to measure and effective criteria are hard to establish. Plan can be expensive to prepare.
CLUSTER ZONING OR PLANNED UNIT DEVELOPMENT (PUD)	Maintains zoning's ratio of housing units to acreage but permits clustered development through undersized lots, thus allowing for open space preservation. A PUD provision allows clustering for large, mixed-use development.	Flexibility in siting allows preservation of open space areas within development. Can reduce construction and infrastructure costs.	Open space often preserved in small separate pieces, not necessarily linked to a comprehensive open space system. May increase processing time for development approval. Lack of infrastructure can inhibit use of technique. Homeowner association may be unprepared to take on responsibility for long-term management of common open space.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
DEVELOPMENT REGULATORY TECHNIQUES cont.			
OVERLAY ZONING	At discretion of municipality, overlay zones with development restrictions can be established to protect agricultural, historic and natural areas; scenic views; and historic neighborhoods.	Special zones have regulations specific to the needs of a unique area and may be subject to mandatory clustering, performance standards, special permits, and site plan and design review.	Language in special district ordinance must be specific enough to avoid interpretations and to ensure that archaeological sites can be protected. Does not address protection needs outside the zone.
AGRICULTURAL & FOREST DISTRICTS	Special districts established to promote continuation of agricultural and forestry activities by protecting against suburban expansion and assessing property based on its actual use.	Maintains land in agricultural and forestry use. Reduces owner's property tax through actual use assessment.	Voluntary participation. Minimum acreage criteria. Does not provide long-term protection. Reduces local government tax revenue. Most effective in areas with high development pressure.
MANDATORY DEDICATION OR EXACTION	As a condition of obtaining subdivision approval, local government requires developers to pay a fee or dedicate land for open space or parkland. Also, states can require open space set-asides as part of environmental review.	New construction pays for its impact on open space;	Acquisition of land or funds dependent upon residential development. Commercial development often not subject to exaction fees. Developer's fair share of costs hard to calculate.
DEVELOPMENT OR SITE PLAN REVIEW	Process of reviewing, approving, approving with conditions (proffers), or denying specific development project proposals for particular parcels of land.	Ensures project compatibility with community's established policies, regulations, standards, and criteria for development. Through proffers, allows regulations to be tailored to the specific needs of each project and parcel of land.	Success requires established regulations, standards and criteria for resource protection, and the presence of skilled review staff.
TRANSFER OF PURCHASE OF DEVELOPMENT RIGHTS (TDR OR PDR)	Under an established program, an owner of publically designated land can sell or transfer development rights to other landowners or to other property of one landowner where increased density can be supported. Under PDR, local or state government purchases development rights to maintain land in farm use or open space.	Cost of preservation absorbed by property owner who purchases development rights. Under PDR program, landowner can derive income from selling development rights and continue to own and use land. Lower property value should reduce property taxes.	Difficult to implement. Preservation and receiving areas must be identified, and residents in receiving area may be unwilling to accept increased density. Under PDR programs, acquisition of development rights can be costly, particularly in communities with high real estate values.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
ENVIRONMENTAL REVIEW			
FEDERAL & STATE REVIEW	Through legislation, government agencies can require public environmental impact statements and measures to reduce impacts of specific developments or can restrict development through permit review.	Encourages preservation of significant natural areas, historic places, and archaeological sites, and allows for objectivity and creative solutions to development conflicts.	If not done early enough, environmental impact assessment and review can be a time-consuming and complicated process which can stall development, adding to project costs.
LOCAL ENVIRONMENTAL ORDINANCES	Often, under mandate of federal or state legislation, localities must regulate development in sensitive areas. Includes floodplain, wetland, watershed, and tree ordinances. Some communities are authorized to require environmental assessment similar to federal and state programs.	Development in protection areas requires a permit. Permit issued only if proposed development is within ordinance guidelines.	Ordinances do not always prohibit development (e.g., in floodplains). Regulatory guidelines are often broad enough to allow subjectivity in permit application approval.
LAWS SPECIFIC TO ARCHAEOLOGY			
ANTIQUITIES STATUTES	Protects archaeological sites by requiring a permit to excavate sites on public land or specially designated sites. Provides penalties for violations.	Permit process ensures that archaeological work is conducted according to professional standards. Prosecution of looters and vandals serves as a deterrent.	Effective only when application is made. Needs monitoring and enforcement to catch violators. May not cover private lands. Doesn't control land uses that can damage or destroy sites.
BURIAL LAWS	Similar to antiquities laws, burial laws regulate the archaeological removal of human burials by a permit system, and require the return of human skeletal remains and associated funerary objects that can be related to modern tribes or descendants. Provides penalties for violations.	Permit process ensures archaeological work is conducted according to professional standards. Prosecution of looters and vandals serves as a deterrent.	Only applies if burial is too be disinterred or excavated. Requires monitoring and enforcement. Does not control land uses that can damage or destroy human burials. May not cover all types of burials.
ABANDONED SHIPWRECKS	The federal law gives states title to abandoned shipwrecks in their waters. States followed with laws of their own to protect underwater sites and to allow sport diving.	Permit process ensures archaeological work is conducted according to professional standards. Prosecution of looters and vandals serves as a deterrent.	Effective only when permit application is made. Multiple agency jurisdiction can complicate statute administration.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
NON-REGULATORY STRATEGIES			
STEWARDSHIP PROGRAMS	Voluntary community participation is site protection through field survey, site recording, site monitoring, site management, and other activities.	Relative low cost. Builds preservation ethic and sense of community responsibility and pride.	Voluntary. Success depends upon participants' strength of commitment. Requires coordination and management. Protection may cease when ownership changes.
COMMUNITY ARCHAEOLOGY PROGRAM	Local government staff administration and management of archaeological programs.	Professional staff administration of local archaeology ordinance: provides focal point for community interest in archaeology; opportunities for citizen involvement and education in archaeology; tourism benefits from interpreted archaeological sites.	May be costly for some smaller communities.
AVOCATIONAL AND PROFESSIONAL ARCHAEOLOGY ORGANIZATIONS	Membership organizations typically for purposes of sharing information among members, learning about archaeology, carrying out archaeological projects, and promoting archaeological benefits to others.	Organized group of people committed to archaeology can be very effective in doing field survey, monitoring protected sites, conducting other projects, educating the public, and influencing decision makers.	Effectiveness of organizations depends on nucleus of active members and ability to coordinate with other groups with similar goals.
FINANCIAL INCENTIVES			
ACTUAL USE OR PREFERENTIAL ASSESSMENT	Under some state laws, open space, historic properties, and agricultural and forest districts can be assessed at the land's actual use rather than at its highest and best use.	Promotes resource conservation and management. Especially benefits landowners in areas with development pressure. Tax base loss can be partially reclaimed through penalty tax on landowners who terminate enrollment.	Voluntary participation. May not provide long-term protection. Strength of program depends on penalty for withdrawals. Local government bears burden of reduced tax base.
INCOME TAX REDUCTION	Donation or bargain sale of full or partial interest in land to a qualified organization for conservation purposes in perpetuity can reduce landowners federal income taxes; state tax reduction may also be taken.	Landowner retains use of property and land remains on local property tax rolls.	Must meet IRS rules for charitable donation.
PROPERTY TAX REDUCTION	Property taxes are reduced due to change in method of assessment (e.g., actual use), property is listed on the National or State Register of Historic Places, or its value is reduced due to protective restrictions.	Landowners tax bill is reduced.	Local government property tax revenues are reduced. Some property tax reduction programs may be temporary.

TECHNIQUES	EXPLANATION	ADVANTAGES	DISADVANTAGES
FINANCIAL INCENTIVES cont.			
ESTATE TAX REDUCTION	The donation or bargain sale of full or partial interest in land reduces the assessed value of the land due to the restriction placed on its use. The resulting lower land value is reflected in a lower estate value, which reduces estate taxes.	Reduction in inheritance taxes. Heirs may not need to sell land to pay the tax.	Must meet IRS rules for estate taxes.

APPENDIX J

NORTHERN AND SOUTHERN ADVISORY
COUNCIL RECOMMENDATIONS

APPENDIX J

NORTHERN AND SOUTHERN ADVISORY COUNCIL RECOMMENDATIONS

The Northern and Southern Advisory Councils were established by the Allegheny Wild and Scenic River Act, Section 2. Their function was to provide advice on establishment of final corridor boundaries and the management of the river. Council members are appointed as directed by the Act: one each from the Forest Service and the Pennsylvania Department of Environmental Resources, members representing county commissioners and riparian landowners, and a representative of a non-profit conservation group. Council members are to serve a term of 3 years, and the Councils will cease to exist 10 years after the passage of the Act (4/20/92). Public Advisory Council meetings were held during 1993 and 1994 to solicit public comments concerning the management of the river. Each Advisory Council submitted a list of objectives and recommendations for river management (See Appendix D). They also provided information and recommendations concerning corridor boundaries.

The Northern Advisory Council Submitted recommendations for management of the designated Allegheny Wild and Scenic River for the segment from Kinzua Dam to the US Route 6 Bridge in Warren and the segment from Buckaloons to Alcorn Island, just North of Oil City. The Southern Advisory Council submitted recommendations for management of the segment of the Allegheny Wild and Scenic River from Franklin to Emlenton. The following table summarizes their recommendations.

NORTHERN ADVISORY COUNCIL MEMBERS

John E. Brown	Robert M Carringer
Harold J. Coleman (resigned)	James A. Etzel
Marion H. Hrobovcak (PA DER)	Lionel A. Lemery (USDA Forest Service) - chair
Norman C. Patterson	Jack J. Sherman (resigned)
Lewis E. Weingard	
Nominated, pending appointment	
Jonathan P. Carlson	Harry E. Tucker

SUMMARY OF NORTHERN ADVISORY COUNCIL RECOMMENDATIONS

Resource Issues	Objectives	Draft Recommendations
Recreation * enhance recreational opportunities while minimizing conflict between landowners and river users	* Endorse only low-impact recreational development activities on currently undeveloped islands * Maintain Wild & Scenic River classification * Maintain adequate water flow levels * Encourage recreational opportunities	* Screen large industrial or commercial structures with native vegetation to break up outlines as seen from river * Establish 100' set-back for new industrial and commercial facilities * Screen oil and gas facilities, sand and gravel, and timber roads and landings with native vegetation * Make openings as seen from the river blend with existing terrain and vegetative patterns * Maintain continuous forest canopy on hillsides * Small structures such as family dwellings are a common part of the landscape and should be addressed through local zoning * Encourage willing seller purchase by Forest Service of islands which clearly have potential for recreational facilities and identified as needed
		* Work with Corps of Engineers (COE), Pa Department of Natural Resources (DER), and Oil City to remove dangerous navigation obstructions at the site of the old Oil City Bridge
Recreation cont.		* Work with COE to develop improved method of communication to inform the public, in advance, of significant water level changes * Support facilities at public access sites should include: parking, sanitary facilities, telephone, trash receptacle, boat launch with paved or hardened ramp, limited picnicking, information board or kiosk * Upgrade present boat launch facilities * Tionesta boat ramp should be redesigned or relocated * Develop a public access site near President * Support facilities at rest stops should include: sanitary facilities, information board, reasonable bank access, (no paved ramp) * Establish a Forest Service campground near Tionesta * Establish rules for camping on public islands * Continue management of Tidioute Overlook * Encourage development of bike/hike trail on old railroad grade from Irvine to Oil City * Improve parking at entrance to Tanbark Trail and canoe rest area at Rt. 62

SUMMARY OF NORTHERN ADVISORY COUNCIL RECOMMENDATIONS

Resource Issues	Objectives	Draft Recommendations
Management Effectiveness <ul style="list-style-type: none"> * coordinate responsibility and authority in river management 	<ul style="list-style-type: none"> * Utilize team effort among government agencies and conservation groups * Develop long-term public understanding and support for the management plan * Advisory Board should oversee final Plan 	<ul style="list-style-type: none"> * Improve communication and coordination of all enforcement, regulatory and management agencies within the corridor * Utilize existing visitor centers at Kinzua Dam, Tionesta and Oil City for distributing information * Continue insect control (black fly and Gypsy moth) as currently practiced
Private Lands <ul style="list-style-type: none"> * protect river values on private lands 	<ul style="list-style-type: none"> * Maintain the river's character * Guide or mold changes on private lands to maintain river values * Avoid negative impacts on riparian landowners * Discourage development on currently undeveloped islands * Maintain natural character in the visual corridor 	<ul style="list-style-type: none"> * Provide a condensed version of the Management Plan to riparian landowners and river users * Provide brochures and press coverage to inform the public * Respect and protect riparian landowner rights * use a friendly, proactive approach to inform the public about responsible river use as a means to prevent conflicts with private landowners - follow up with strict enforcement for those who violate (litterers, vandals, etc.) * Keep river users informed of public facilities and recreation opportunities
Fish, Wildlife and Plant Species <ul style="list-style-type: none"> * enhance protection of the river's native habitat including threatened and endangered species 	<ul style="list-style-type: none"> * Protect critical habitat of threatened and endangered species around the islands * Preserve the diversity of natural resources 	<ul style="list-style-type: none"> * Prohibit disturbance of threatened and endangered species and their habitat * Continue fisheries management by the PA Fish and Boat Commission * Increase communications between the Corps of Engineers and the PA Fish and Boat Commission regarding spring "wash out" of bass spawning beds * Continue PA Game Commission management programs in the corridor * Coordinate re-introduction programs for wildlife - consider select islands

SUMMARY OF NORTHERN ADVISORY COUNCIL RECOMMENDATIONS

Resource Issues	Objectives	Draft Recommendations
Cultural Resources <ul style="list-style-type: none"> * maintain and enhance cultural on both public and private lands 	<ul style="list-style-type: none"> * Foster wide-spread cultural resource conservation ethic * Encourage identification and mapping of archaeological sites, historic structures, and potentially significant sites 	<ul style="list-style-type: none"> * Include as many potentially significant sites as possible in the corridor boundary * Assure compliance with existing state and federal laws * Encourage the Forest Service to interpret sites on National Forest Land for public education * Encourage a cooperative effort between federal, state and counties to preserve and maintain in working order the Timber crib dam at the mouth of Tionesta Creek * Encourage cooperative effort between Carnegie Museum, Forest Service, PA Bureau of Historic Preservation and the PA Archaeological Council to secure appropriate protection and management of selected sites
Water Quality <ul style="list-style-type: none"> * maintain or improve the surface water quality within the corridor 	<ul style="list-style-type: none"> * Maintain or improve water quality levels established by state and federal statutes 	<ul style="list-style-type: none"> * Continue PA Department of Environmental Resources, Corps of Engineers and US Geological Survey water monitoring

SOUTHERN ADVISORY COUNCIL MEMBERS

Marlin R. Gatty
 John H. Hummel
 Lionel A. Lemery (USDA Forest Service)
 James R. Wilson

Marion Hrubovcak (PA DER) - chair
 Ronald L. Larimore
 Thomas N. Thomas

SUMMARY OF SOUTHERN ADVISORY COUNCIL RECOMMENDATIONS		
Resource Issues	Objectives	Draft Recommendations
Recreation * enhance recreational opportunities while minimizing conflict between landowners and river users	* Manage recreational activities along the corridor and contiguous public lands	<ul style="list-style-type: none"> * Support/supplement efforts by the Allegheny Valley Trails Association (AVTA) in their Rails To Trails effort * Improve Bureau of Forestry primitive camping area across river and 2.5 mi N of Kennerdell; develop river access for shore fishing * Improve public boat access sites/rest areas at Franklin, Fisherman's Cove, and Emlenton. Add boat access between Kennerdell and Emlenton * Provide paved ramp, toilets, information, signing, telephone, lights, self registration, parking, and trash cans at all access sites * Direct river users to private and State Forest campsites * Enhance non-game wildlife enjoyment on State Game Lands by working with conservation organizations, PA Bureau of Forestry and PA Game Commission * Coordinate with the Oil Region Heritage Park (ORHP) effort to provide driving tours, interpretive and recreational enhancement * Work with private land owners to provide facilities and some control for car camping at Big Sandy, Big Scrubgrass and Mill Creek * Develop river access for shore fishing * Maintain access for trout fishing on stocked tributaries and encourage rehabilitation of Big Scrubgrass and Mill Creek * Develop or maintain overlook on SR 322 in Cranberry Twp, Kennerdell, Dennison Run, Window Trail, Brandon Acres, Mill Creek, and Rt. 208 (Emlenton) * Use public lands for hike/bike trail rest stops * Make recreational use of the river more family oriented * Protect private property from abuse * Advertise to attract tourists

SUMMARY OF SOUTHERN ADVISORY COUNCIL RECOMMENDATIONS

Resource Issues	Objectives	Draft Recommendations
Management Effectiveness <ul style="list-style-type: none"> * coordinate responsibility and authority in management of the river 	<ul style="list-style-type: none"> * Involve local agencies and organizations in preserving/managing identified resources * Coordinate the activities and responsibilities of people/organizations/agencies carrying out the management plan 	<ul style="list-style-type: none"> * Establish a permanent management council * Provide public education and information * Monitor compliance with existing laws * Coordinate actions of regulatory, law enforcement, management agencies, and municipalities in the corridor * Establish a community crime watch program for Ajax, Belmar, Fisherman's Cove, Rogers Riviera, Rockland Station, St. George, Kennerdell, Brandon Acres, and Coulter's Hole * Create a summer youth program for maintenance and custodial services on public lands and the river * Conduct aerial patrols on a monthly basis * Develop a permanent ranger station for PA Bureau of Forestry and Fish and Boat Commission at Kennerdell * Provide adequate agency funding to carry out the Wild and Scenic River Management Plan * USDA Forest Service should develop a working relationship with timber and oil and gas operators within the river corridor * Mail Forest Stewardship information to all landowners and encourage use * Develop information/visitor center at Salt Box House hike/bike trailhead in Cranberry Township
Private Lands <ul style="list-style-type: none"> * protect river values on private land 	<ul style="list-style-type: none"> * Create guidelines for future development * Retain social values of river communities * Enhance the quality of life along the river 	<ul style="list-style-type: none"> * County planning commissions working with townships should take lead to develop specific plans, ordinances and enforcement for private property * Screen all new industrial development with natural vegetation * Maintain continuous forest canopy over 80% of the forested hillsides * Establish minimum lot size, and height standards for new residential development * Establish 100' set-back from shoreline for new development * Encourage commercial and industrial development in industrial parks * Develop guidelines for commercial signs

SUMMARY OF SOUTHERN ADVISORY COUNCIL RECOMMENDATIONS

Resource Issues	Objectives	Draft Recommendations
Fish, Wildlife and Plant Species <ul style="list-style-type: none"> * enhance protection of wildlife habitat, including threatened and endangered species * maintain biodiversity 	<ul style="list-style-type: none"> * Protect endangered species and critical habitat * Encourage wildlife reintroduction programs * Inventory and research plants and animals within the corridor 	<ul style="list-style-type: none"> * Purchase all privately owned islands between Franklin and Emleto for public domain from willing private owners * Clarify existing laws and develop guidelines for future island use * Protect special island values such as critical wildlife habitat * Limit island development * Erect nesting platforms where appropriate * Involve local sportsmen's clubs and conservation groups in management * Support willing seller purchase of undeveloped tracts for public hunting and fishing * First priority purchase should be for critical wildlife habitat * Reintroduce bald eagle, otter and osprey where appropriate * Obtain baseline information through special * Provide information and education on threatened and endangered species within the river corridor
Cultural Resources <ul style="list-style-type: none"> * maintain and enhance cultural resources on both public and private lands 	<ul style="list-style-type: none"> * Secure funding for management and maintenance of identified resources * Involve local agencies, private land owners and organizations in preserving/managing identified resources 	<ul style="list-style-type: none"> * Promote Site Stewardship Program on private land sites such as the Kennerdell monument and sand works plant * Protect and interpret Indian God Rock * Protect and interpret historic iron furnaces * Purchase private land rights where needed on willing seller basis * Coordinate with AVTA and ORHP efforts * Interpret the Charley oven site; purchase and restore Kennerdell village; Purchase and interpret Roberts Run Barge * Encourage County/Township zoning or ordinances to protect known sites * Maintain Kennerdell and Rockland tunnels as part of the rail trail * Restore Ft. Venango in conjunction with ORHP plan * Do archaeological survey on PA Bureau of Forestry lands

SUMMARY OF SOUTHERN ADVISORY COUNCIL RECOMMENDATIONS

Resource Issues	Objectives	Draft Recommendations
Water Quality * maintain or improve surface water quality	* Maintain or improve water quality levels to those established by state or federal statutes * Prohibit development of new obstructions affecting the free flowing character of the river	* Encourage owners of substandard septic systems to upgrade * Encourage municipalities to investigate Pennvest funding to upgrade substandard residential septic systems * Assure new development complies with existing sewage regulations * Encourage PA Department of Environmental Resources to take a more cordial (less antagonistic) approach when dealing with private septic systems * Establish baseline water quality data * Establish voluntary water monitoring * US Geological Survey should establish permanent water quality monitoring stations at Franklin and Emlenton * Vigorously enforce existing laws * Promote appropriate logging and oil and gas access developments * Provide toilet facilities at public access points and rest areas * Provide trash removal on public lands * Encourage use of private trash haulers by residence owners * Promote annual river clean-up for awareness * Provide two days per year for disposal of large items (appliances) * Identify all orphan/abandoned wells and establish priority for correcting problems * Clean up existing dump at Brandon Acres

APPENDIX K

BIOLOGICAL EVALUATION

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APPENDIX K

BIOLOGICAL EVALUATION

INTRODUCTION

This biological evaluation analyzes the potential effects of the three alternatives in the Allegheny Wild and Scenic River Environmental Impact Statement (EIS) on the seven threatened and endangered species which may possibly exist on the Allegheny National Forest (USDI Fish and Wildlife Service 1994). It also analyzes the potential effects on the 19 sensitive species currently listed by the Regional Forester. Sensitive species are those species listed in the Federal Register as under review (Category C1 and C2) and those ranked by the Nature Conservancy as globally or locally imperiled or rare (G7 through G3). Most species listed by Pennsylvania are included as Regional Sensitive Species. Those state species that do not meet the above criteria are discussed elsewhere in the Management Plan (p. 18). The names and current status of these species are shown in the Species section, below. (The U.S. Fish and Wildlife Service announced plans to develop the Category 2 species list in September 1995. The Forest Service has not determined whether this change will result in changes to the Region 9 Sensitive Species List.) The current policy as stated in the Forest Service Manual (FSM 2670.31) for threatened and endangered species, includes, but is not limited to, the following:

- A. Through the biological evaluation process, review actions and programs authorized, funded or carried out by the Forest Service to determine their potential for effect on T&E species and species proposed for listing.

Policy (FSM 2670.32) for Sensitive Species includes but is not limited to the following:

- A. Avoid or minimize impacts to species whose viability has been identified as a concern.
- B. If impacts cannot be avoided, analyze the significance of the potential adverse effects on the population or its habitat within the area of concern and on the species as a whole.

SPECIES

Plants

1. Isotria medeoloides - Small-Whorled Pogonia
2. Carex wiegandii - Wiegand's sedge
3. Euphorbia purpurea - Darlington's spurge
4. Marshallia grandiflora - Large-flowered barbara's buttons
5. Juglans cinerea - Butternut

Reptiles and Amphibians

6. Thamnophis brachystoma - Short-headed garter snake
7. Cryptobranchus alleganiensis - Hellbender

Birds

8. Haliaeetus leucocephalus - Bald eagle
9. Falco peregrinus anatum - Peregrine falcon
10. Dendroica cerulea - cerulean warbler
11. Accipiter gentilis - northern goshawk

Mammals

12. Sorex palustris - Water Shrew
13. Myotis leibii - Eastern Small-footed Bat
14. Myotis sodalis - Indiana bat
15. Sylvilagus obscurus - Appalachian cottontail
16. Neotoma floridana - Allegheny woodrat

Invertebrates

17. Epioblasma torulosa rangiana - Northern Riffleshell mussel
18. Pleurobena clava - Clubshell mussel
19. Nicrophorus americanus - American Burying Beetle
20. Stylurus scuderi - Scudder's clubtail dragonfly (Zebra clubtail)
21. Gomphus viridifrons - Green-faced clubtail

Fishes

22. Ichthyomyzon bdellium - Ohio Lamprey
23. Etheostoma camurum - Bluebreast Darter
24. Etheostoma maculatum - Spotted Darter
25. Etheostoma tippecanoe - Tippecanoe Darter
26. Percina macrocephala - Longhead Darter

HABITAT REQUIREMENTS

Plants

1. **Small-Whorled Pogonia** is a Federally-listed threatened plant that occurs 15 miles west and 55 miles east of the Allegheny National Forest (ANF). In Pennsylvania, it mainly occurs on dry oak sites on benches, saddles or near the beginning of intermittent drainages, usually on south or southeast facing slopes. It is believed the reason of decline could be due to loss of habitat, the susceptibility to deer browse and the undetermined dormancy of the plant (Carol Copeyon, personal communication).

Since 1987, more than 40,000 acres have been surveyed, Forestwide, but no small-whorled pogonias have been found. The USDI Fish and Wildlife Service has recently completed a recovery plan for the pogonia.

2. **Wiegand's Sedge** is a Regionally-sensitive species that is mainly found in acidic soils of drier, sometimes disturbed, margins of acidic sphagnum bogs or poor fens. No known extant populations exist and are thought to have been lost through wetland drainage and/or succession (Reznicek pers. comm. in Ostlie 1990). It is known from two sites in Pennsylvania, both south of the glacial boundary within the Allegheny Mountains. Occupied habitat is characterized as high-plateau white pine-hemlock-mixed hardwood swamps especially where beaver activity has inundated the ground and trees have recently died due to high water (Bissell pers. comm. in Ostlie 1990).
3. **Darlington's Spurge** is a Regionally-sensitive, Federal candidate (C2) species. It occurs most commonly in seepage swamps or spring seeps at the headwaters of streams or creeks (Rawinski and Cassin 1986 in Ostlie 1990). It is occasionally found in non-moist conditions, reflecting the fact that the species is not an obligate hydrophile (Knoop 1990, Rawinski and Cassin 1986 in Ostlie 1990).

Only one extant population exists in eastern Pennsylvania in a swamp along an inter-montane valley stream. These oblong wetlands run parallel with the stream with seepage water slowly running through them (Bier pers. comm. in Ostlie 1990). It is doubtful that the species exists on the ANF (Charles Bier written correspondence).

4. **Large-flowered Barbara's Buttons** is a Regionally-sensitive species. Northern range of this species is central Fayette County. It is not likely to be found on the Allegheny or the Allegheny region (Charles Bier, written correspondence). In West Virginia, the habitat for this species is described as sandy or rocky river banks, usually in the mountains (Britton and Brown 1970 in Strausbaugh and Core 1970).
5. **Butternut** is a Regionally-sensitive, Federal candidate (C2) species with a range that extends throughout Pennsylvania. Through most of its range, butternut is not a common tree, and its frequency is declining. Climatic conditions, mean annual temperatures, annual precipitation and frost free periods vary widely throughout its range.

Butternut grows best on streambank sites and on well drained soils. It is found most frequently in coves, on stream benches and terraces, on slopes, and in the talus of rock ledges, up to an elevation of 4900 feet.

Butternut is a shade intolerant species that must be in the overstory to survive. Insect enemies are often pests of associated trees. The most serious insect pest is the butternut curculio, and the most serious disease is butternut canker. The common grackle has been reported to destroy immature fruit and may be considered a pest when populations are high (USDA 1990).

Reptiles and Amphibians

6. **Short-headed Garter Snake** is a Regionally-sensitive, Federal candidate (C2) species that inhabits areas with brush cover or piles of stones, meadows, and creek borders, near or in water. Prefers open herbaceous areas (DeGraaf and Rudis 1981).

The Pennsylvania biological survey considers this species abundant where it occurs. Recent data indicates that this species has been transplanted and is proliferating (Charles Bier written correspondence).

7. **Hellbender** is a Regionally-sensitive, Federal candidate (C2) species that inhabits clear, rapidly flowing rivers and permanent streams and brooks several feet deep with rocks, logs or other bottom objects to provide cover. Sometimes occurs in small rocky streams (DeGraaf and Rudis 1981). Rarely encountered in water above 20 degrees centigrade (Dundee 1979 in DeGraaf and Rudis 1981). The hellbender feeds on crayfish, snails and aquatic insects (Shaffer 1991).

Considered common in the Allegheny River Watershed, the preliminary recommendations of the Pennsylvania biological survey are that this species is not rare (Charles Bier written correspondence). Available habitat has declined due to industrial pollution and lowered oxygen levels (Dodd 1979 in DeGraaf and Rudis 1981). This species has been collected in Tionesta Creek and the Allegheny River.

Birds

8. **Bald Eagle** is a Federally- and State-listed endangered species that breeds in forests, open areas and mountains, usually near large bodies of water with abundant fish. Winters inland where ice-free waters allow access to fish and on ice-bound lakes where carrion such as deer carcasses are available (DeGraaf and Rudis 1986). Insolation from human disturbance may also be a habitat requirement. The Bald Eagle is known to occur on the Allegheny National Forest, where fish in the Allegheny River and Allegheny Reservoir are its main source of food. Both juveniles and adults are seen on a regular basis and, in addition to the Allegheny River and reservoir, it is not uncommon to see eagles on some of the larger streams such as Tionesta Creek, Kinzua Creek and the Clarion River.

To date, two nesting sites have been identified on the Forest, one along the Allegheny Reservoir and one along the Allegheny River. These nests are being monitored by the Pennsylvania Game Commission and USDA Forest Service. During the Springs of 1988, 1989, 1991, 1993, and 1994, aerial surveys were done to locate eagle nests on the Forest.

9. **Peregrine Falcon** is a Federally- and State-listed endangered species. This bird typically breeds on high, rocky cliffs of mountains, often near a river, stream, or other body of water. It requires high cliffs for nesting with a clear view of surroundings. Small to large birds serve as the staple prey base, although it occasionally takes mammals and dead fish (DeGraaf and Rudis 1986).

The Allegheny National Forest lies within the range of this species. The recently completed Pennsylvania Breeding Bird Atlas Project did not find any peregrine falcons on or near the Forest (Brauning 1992). No historically occupied eeries occur on the Forest.

10. **Cerulean Warbler** is a Federal candidate species (C2) and is ranked in the Commonwealth of Pennsylvania as S4, apparently secure by the Pennsylvania Natural Diversity Inventory (P. B. Hamel 1992 in Schneider et al. 1992). In Pennsylvania, this species is partial to mature upland oak woods to wooded hillsides along streams and rivers. This warbler appears to prefer to nest in oaks if they are available (Simpson 1910, Harrison 1984), but will also use other deciduous trees. Nest tree height apparently is critical: almost all cerulean warbler nests documented in Pennsylvania were at least 25 feet, and most were more than 40 feet above ground (Brauning 1992). This species is apparently very sensitive to forest fragmentation (Robbins et al. 1989).

Its presence on the Allegheny National Forest has been confirmed during the breeding bird survey, and survey data indicates that in Warren and Venango Counties, the cerulean warbler clearly follows the Allegheny River Valley (Brauning 1992). The cerulean warbler was also identified on the Tracy Ridge breeding bird transect, which occurs in the oak timber type on the east bank of the Allegheny River.

Baird (1990) looked at changes in nesting densities for breeding birds within the Quaker Run watershed in Allegany State Park since 1930. The Cerulean Warbler was one of the species discussed, and he found it to be a common species of the mature oak-hickory forest in 1983-1985. He also noted that the cerulean warbler may have been displaced from the Allegheny River bottomlands by the formation of the Allegheny reservoir, which

may have stimulated the Cerulean Warbler increase in the higher oak woodlands adjacent to the Allegheny River. Baird (1990) estimated 87 breeding pairs occurred within the Quaker Run valley between 1983 and 1985.

Maturation of the forest and increased browsing by deer were the two most significant changes in terrestrial habitats of the Quaker Run valley during the past 50 years.

11. **Northern Goshawk** is a Federal candidate (C2) species that is listed in the State of Pennsylvania as status undetermined (Genoways and Brenner 1985). However, based on data collected in the breeding bird survey, it is considered rare over much of the Commonwealth. It is recommended that its status be classified as vulnerable (Brauning 1992).

Goshawk research conducted in Pennsylvania (Kimmel 1988-1992 unpub. data) indicates that in the northern hardwood region, which includes the ANF, goshawk nests occurred at higher elevations. He recommends that the management of goshawk habitat in Pennsylvania should provide landscapes that contain >60% forest cover (preferably 90%). Potential nest sites should be on fairly level ground (e.g. <12% slope), on or near the tops of plateaus, in remote and relatively undisturbed areas. It is recommended that mixed conifer stands comprise about 5 to 20% of the total land base. Kimmel also found that goshawks select nest sites away from non-forest edges and medium-heavy duty roads. Nesting habitat data suggests the bird is an old-growth, closed canopy obligate. For larger sized macrohabitat plots, Goshawk selected areas for nesting that contained greater amounts of forest, particularly mixed/evergreen forests (presumably a more important foraging habitat) and less residential land-use area.

Mammals

12. **Water Shrew** is a Regionally-sensitive species and a Pennsylvania State threatened species which is considered to be rare. This species is found in wet areas, especially grass/sedge marsh or shrub zones along ponds and streams in coniferous forest (Wrigley et al. 1979 in DeGraaf and Rudis 1986; New England Wildlife: Habitat Natural History and Distribution). It is believed they travel along the waters edge and hide from predators among rocks, root wads and logs. Water shrews actually dive into the water and forage on benthic invertebrates. It is important to maintain the bank structure, including undercut banks, since this appears to be the important habitat component. Maintaining the quality of the aquatic environment where they feed is also important (Charles Bier in A Survey of Shrews report March 1994).

Most of the water shrews reported in Pennsylvania were collected from montane areas near high gradient rock-bedded creeks with the surrounding forest consisting of heavy stands of hemlock, spruce and rhododendron (Grimm and Whitebread 1952 in Genoways and Brenner 1985). Buckner and Ray 1968 (in DeGraaf and Rudis 1986) report this species to have a small home range from one-half to one acre in size.

This species has been collected on the ANF along the upper reaches of the Bear Creek drainage on the Ridgeway Ranger District. The stream width is 2-5m with depths between .1 and 1.0m. Canopy closure is 25 - 75% of hemlock, yellow birch and red maple. Understory trees are predominately hop hornbeam and witch hazel with a ground covering of hayscented fern, New York fern, wintergreen and various mosses. The collection site was adjacent to a palustrine emergent wetland. Gradient will not be considered a limiting factor for this project area but rather maintaining the water quality and streamside habitat.

13. **Eastern Small-footed Bat** is a Regionally-sensitive, Federal candidate (C2) species. It is also listed in the State of Pennsylvania as Threatened. It occurs in or near woodlands in caves, mine tunnels, buildings, crevices and rocks. Maternity colonies have been observed in buildings (Hitchcock 1955 in DeGraaf and Rudis 1986).

There are no known records of the Eastern small-footed bat on the ANF, but the Forest lies within its known range (Merritt 1987).

14. **Indiana Bat** is a Federally-listed and State of Pennsylvania-listed endangered mammal that has been found to winter in limestone caves in southcentral Pennsylvania. Although the ANF is within the range of the Indiana bat, the Forest does not contain limestone or other geologic formations that create medium to large-sized caves required by the bat. During the summer months, this species roosts under the bark of trees in riparian/riverine habitat.

A bat survey in Pennsylvania conducted in the early 1980s found only 150 bats, and all records are from caves or abandoned tunnels (Merritt 1987). Disturbance of hibernating colonies is considered to be the primary limiting factor affecting its decline (Genoways and Brenner 1985).

15. **Appalachian Cottontail** is a Regionally-sensitive, Federal candidate (C2) species and listed in Pennsylvania as a species at risk. A recent statistical analysis of the species *Sylvilagus transitionalis*, New England Cottontail, has revealed two discrete karyotypes to support the recognition of two sibling species. The Appalachian cottontail species, *Sylvilagus obscurus*, is generally an inhabitant of higher elevations and is restricted to the Appalachian Mountains and their associated mountain balds from the Hudson River through New York, Pennsylvania,

Maryland, West Virginia, Virginia, Tennessee, North Carolina, South Carolina, Georgia and Alabama. The Appalachian cottontail utilizes different habitats from thick cover of conifers to barren, high wind-swept plateaus (Chapman et al 1992).

It tends to favor forests with dense understories of shrubby vegetation in Northeast Pennsylvania and is often common in habitat characteristic of 0-10 year-old clearcuts, dense understory shrub layer and areas of dense mountain laurel and rhodoendron.

16. **Eastern Woodrat** is a Regionally-sensitive, Federal candidate (C2) species that is listed in the State of Pennsylvania as Threatened. This species typically lives in limestone caves or broken rock habitat such as cliff faces, boulder piles, or coarse talus (Poole 1940; Doult et al. 1967 in Genoways and Brenner 1985). Such habitat is found throughout areas of the Commonwealth, cliff faces along the Appalachian Mountains, and specifically at water gaps where cliff faces and boulder piles are usually abundant.

The eastern woodrat is primarily a vegetarian that feeds on the leaves of herbaceous plants, berries (wild grapes), and nuts such as acorns and beechnuts. In the fall, the woodrat caches a variety of leafy twigs, branches of trees and shrubs and even puffballs and mushrooms (Merritt 1987).

The Allegheny National Forest is on the northern edge of the range for this species. The woodrat historically occurred at the Rim Rock recreation area in Warren County (person communication Cal Butchcaski). Searches for this species along the Clarion River in 1992 did not reveal any positive evidence of its existence. This species has declined from historical habitat in eastern Pennsylvania which is the basis for its classification as threatened in the State (Genoways and Brenner 1985).

Invertebrates

17. & 18. **Northern Riffleshell and Clubshell Mussel** are Federally-listed endangered freshwater mussels. The clubshell occurs in clean swept sand and gravel in medium to small rivers and streams, 10' wide and above, and can also be found buried in clean, loose sand to a depth of two to four inches. The northern riffleshell occurs in a wide variety of large freshwater streams preferring runs with a bottom composed of firmly packed sand and fine to coarse gravel (Stansbery et al. 1982 in Federal Register 1993). Although little is known about the life history of these species, they do require one or more fish species as host to complete their life cycle (Federal Register 1993).

The range reduction for these species is attributed to physical loss of habitat and degraded water quality, related primarily to water impoundments, channelization, streambank clearing and agriculture. Impacts associated with run-off from human waste, chemical outfalls and coal mining have also affected many tributaries. Increased turbidity and suspended sediments can result in increased water temperature, decreased oxygen levels and siltation. Impacts to the fish species composition can also affect reproduction since a fish host is an integral component of the mussel's reproductive cycle (Federal Register 1993).

Presently these two species co-occur in portions of four streams in the State. In Pennsylvania, they occur in Erie, Mercer, Venango, Crawford, Warren, Forest, and Clarion Counties and the Allegheny River, Warren and Forest Counties. In 1989 the Forest Service and Western Pennsylvania Conservancy funded and conducted a survey of freshwater mussels in the Allegheny River near the Wilderness Islands. Both the Clubshell and Riffleshell were found. Further surveys conducted in the Allegheny River have revealed additional locations of these species. These species do not seem to utilize characteristic brook trout streams (Charles Bier personal communication). Continuously-cold water may prevent mussels from reproducing (USDI Fish and Wildlife Service 1993).

19. **American Burying Beetle** is a Federally-listed endangered species. This species is thought to prefer old growth forests or mature forests with little interfering understories, although in addition to mature forests it has also been found in recently regenerated stands (Carol Copeyon pers. comm.).

Historic records from Pennsylvania include 11 specimens from Philadelphia, Pittsburgh, Allegheny County, Lancaster County, and "Angora" (county unknown) (Genoways and Brenner 1985). However, records from the Carnegie Museum of Natural History indicate that this species has not been collected in Pennsylvania for several decades.

It was formerly believed that existing old growth habitat in Hearts Content and Tionesta Scenic Area would provide the most suitable habitat, due to the deeper duff layers that may be preferred by this species to bury its carrion. However, recent research in the mid-west seems to indicate that the occurrence of this beetle is closely tied to prey availability and not a specific habitat type (Carole Copeyon personal communication). Records from

the Carnegie Museum of Natural History indicate that this species has not been collected in Pennsylvania for several decades. In addition, a survey was completed on the Forest in 1993 using pitfall traps and no burying beetles were found (Charles Bier personal communication).

20. Scudder's Clubtail Dragonfly is a Regionally-sensitive species that inhabits forest streams or slow rivers with alternating riffles and pools and gravelly to rocky or sandy substrate. Historically, it has been found along the Clarion River (Genoways and Brenner 1985). The Western Pennsylvania Conservancy and Forest Service conducted a survey of the dragonflies and damselflies along the Clarion River and its tributaries during the spring/summer of 1993. A recording of this species was confirmed during this survey (Western Pennsylvania Conservancy 1993).
21. Green-faced clubtail is listed as a Regional sensitive species. It has been historically recorded in Pennsylvania from the Ohio River and the Youghiogheny River at Fayette County. It is believed that the degradation of water quality and change of physical characteristics was the leading reason for the loss of this species from these rivers (Genoways and Brenner 1985). This species was found during the dragonfly, damselfly survey conducted along the Clarion River in 1993 (Western Pennsylvania Conservancy 1993).

Fishes

22. The Ohio Lamprey is a Regionally-sensitive species. The lamprey occurs in the sand and gravel bottoms of riffles of moderate-sized streams. The young dig into bars and beds containing a combination of sand, dark muck, and organic debris which is free from clayey silt, where they feed on drifting microscopic food for an unknown amount of years. Such a life history requires rather clean waters for feeding; clean stream bottoms of sand, organic debris, and gravel which are not covered by silt or otherwise polluted, for ammocete development (Trautman 1981). The Ohio Lamprey has been documented as occurring in the Allegheny River (Lee 1975).
23. Bluebreast Darter is a Regionally-sensitive species. It is found in fast runs and riffles of medium to large streams over firm substrates of rock and rubble. It exhibits a marked preference for sections up to 30 cm in depth (Cooper in Genoways and Brenner 1985).

Historic records show it was found in the Allegheny River, Warren County, PA. vicinity of Kinzua Dam, Tionesta Creek, Forest County, PA. near Mayburg, and Little Coon Creek, Forest County, PA. tributary to Tionesta Creek (USDI-FWS J. A. Boccardy 1958-74). The most recent documentation of the bluebreast darter is from a stream survey of West Branch Tionesta Creek (Woomer and Lee 1994).

24. Spotted Darter is a Regionally-sensitive species. It is found either adjacent to or in swift deep riffles of large streams over a substrate of large rubble (Cooper in Genoways and Brenner 1985).

This darter has been found sporadically in a few tributaries of the Ohio River system in New York and Pennsylvania. Collection of this species have been made in French Creek, Crawford County, PA. and Middle Branch Genesee River, Potter County, PA. (E. L. Cooper 1966-71). The spotted darter has been documented as occurring in the Allegheny River (Lee 1975).

25. Tippecanoe Darter is a Regionally-sensitive species. Typical habitat is the riffle areas of rivers or large creeks adjacent to rivers. Moderate current, clean gravel substrate, and depths of 10-50 cm are preferred (Kuehne and Barbour 1983). Historically found in French Creek southwest of the Forest (Cooper 1983). The Tippecanoe darter has been documented as occurring in the Allegheny River (Lee 1975).
26. Longhead Darter is a Regionally-sensitive species found only in upland streams or large rivers. Most frequently inhabiting fast, rocky riffles, it is sometimes found in large pools below riffles, but only where the current is sufficient to keep the bottom free of silt (Cooper in Genoways and Brenner 1985).

Records of this species have been made in several streams such as Conewango Creek, Brokenstraw and Allegheny River of Warren County (E. L. Cooper USFWS 1958-74) and East Hickory Creek of Forest County (Miller, Boario, and Hagar 1963).

SUMMARY OF ACTIONS PROPOSED

The Allegheny Wild and Scenic River EIS provides programmatic direction for implementing a management plan on the Allegheny River. A site specific analysis and biological evaluation will be completed for specific projects as required by the National Environmental Policy Act.

Three alternatives are analyzed in the EIS. A detailed description of each alternative is provided in Chapter 2.

Alternative 1 proposes no change from the current management dictated by the designation of a river as part of the Wild and Scenic River system. A management plan would only include a corridor boundary and zoning guidelines, which are provisions of the Wild and Scenic Rivers Act. The existing laws, regulations, and management plans pertaining to the river corridor would continue to be applicable, but no other new management activities or developments would be proposed.

Alternative 2 proposes a moderate management in the river corridor. Forest Service and Pennsylvania Department of Environmental Resources (managing agencies) direct involvement in river protection and habitat enhancement will be limited. Direct Forest Service involvement in river promotion will be also limited. Five new recreation sites are proposed.

Alternative 3 proposes a maximum level of management. Direct involvement by the managing agencies in river protection and habitat enhancement would be at a high level. Forest Service will be actively involved in river promotion. Nine new recreation sites are proposed.

POTENTIAL EFFECTS UPON THREATENED, ENDANGERED AND SENSITIVE SPECIES AND PROPOSED MITIGATION

Under all alternatives any surface-disturbing projects proposed on federal lands (or federally funded) will require a site specific analysis and appropriate NEPA documentation. The site-specific analysis will contain an assessment of impacts to threatened, endangered, and sensitive species. If data is lacking on the occurrence and distribution of a species that could be impacted by a project, a site-specific survey may be required. Where appropriate specific mitigation measures may be employed to reduce potential impacts. For surface-disturbing projects on private land, a site-specific analysis is recommended but not required by this EIS and Management Plan.

Plants - The wetland-riparian habitat in the river corridor is potential habitat for Wiegand's sedge, Darlington's spurge, large-flowered barbara's buttons and butternut. Upland forest habitat (particularly benches, saddles, and the beginning of intermittent drainages) provides habitat for the small-whorled pogonia.

To avoid impacts to these species the following mitigation measures are suggested for all alternatives:

All wetland-riparian habitat where surface disturbing activities are proposed will be surveyed for Wiegand's sedge, Darlington's spurge, large-flowered barbara's buttons, and butternut. Surface disturbing activities will avoid all locations where these plants are found. A buffer may be required around known plant locations based on the kind of disturbance and the quality of the habitat.

Upland forest habitat that provides potential habitat for the small whorled pogonia, and where surface disturbing activities are proposed will be surveyed for the small-whorled pogonia. If any small-whorled pogonias are found, the U.S. Fish and Wildlife Service and Forest Service will meet to determine the appropriate actions necessary to protect this plant.

Short-headed garter snake - surface disturbing activities in small, rocky or brushy openings in forest uplands could impact this snake. Therefore the following mitigation measure is recommended:

Upland forest habitat that provides potential habitat for the short-headed garter snake, and where surface disturbing activities are proposed will be surveyed for this snake.

Hellbender - a deterioration in water quality or destruction of deep pools could adversely effect this species. However, none of the alternatives would cause a decline in water quality or loss of deep pools so no impacts are anticipated.

Bald Eagle - both winter roosting activity and summer nesting activity should continue to be monitored on the river by Pennsylvania Game Commission, Army Corps of Engineers, and Forest Service biologists. Although increases in recreation use could potentially disrupt nesting activity there is no way to determine how much activity can be tolerated without monitoring the nest site. The current nest site is far enough up the side slope that canoers and anglers floating down river appear to have little impact on nesting activities. Under all alternatives there is a slight chance that roosting or foraging activities could be interrupted for short period of time as canoers and boaters pass by. However, this increase in recreation use is not expected to affect nesting activity and productivity.

Prior to the installation of new access facilities or implementation of other projects on federal land or federally-funded projects, the current eagle use (particularly nesting) will be assessed within the section of river corridor where use will likely increase.

For any new eagle nests found on federal lands within the corridor, activities which may disturb eagles will be restricted between January 15 and July 31. Buffer zone distances to maintain the integrity of the nest site will be determined during discussions between the USFWS and FS.

Peregrine Falcon - no adverse effects are anticipated under any alternative.

Cerulean Warbler - although there is suitable habitat within the river corridor, no activities are planned that will affect this upland forest habitat under any alternative.

Northern Goshawk - suitable nesting habitat exists on the upper slopes of the corridor. No impacts are anticipated under any alternative.

Water shrew - suitable habitat along small tributary streams will not be impacted under any alternative.

Eastern Small-footed bat and Indiana bat - no impacts are anticipated under any alternative.

Appalachian Cottontail and Eastern woodrat - no disturbance of habitat for these two species is anticipated under any alternative. No adverse effects are expected to occur.

Northern Riffleshell and Clubshell Mussels - development of new access sites could potentially disturb existing mussel beds. The following mitigation measure is recommended:

Prior to development of any new access facilities on federal lands or other federally funded projects that disturb the river bottom or cause sedimentation or cause degradation of water quality, a survey to determine the presence of the northern riffleshell and clubshell will be completed. If either species is found the US Fish and Wildlife Service, PA Fish and Boat Commission and Forest Service will meet to determine what measures are necessary to protect these mussels.

All applicable standards and guidelines to protect water quality in the Forest Plan will be implemented on federal lands and recommended for private lands.

Scudder's Clubtail Dragonfly and Green-faced Clubtail - development of new access sites could potentially disturb existing habitat for the larval and adult stages of these two dragonflies. The following mitigation measure is recommended:

Prior to development of any new access facilities or other projects that disturb the river bottom or shoreline vegetation, a survey to determine the presence of Scudder's Clubtail Dragonfly and the Green-faced Clubtail will be completed. Projects will be designed to avoid known occupied habitat.

American Burying Beetle - no impacts are anticipated under any alternative.

Fishes - The Allegheny River provides habitat for five Threatened, Endangered or Sensitive fish species, including the **Ohio Lamprey**, **Bluebreast Darter**, **Spotted Darter**, **Tippecanoe Darter** and **Longhead Darter**. Habitat for these species could be affected by the development of new access sites or other projects that have the potential for water quality degradation. To mitigate against that possibility, the following mitigation measure (similar to what is written for the northern riffleshell and clubshell mussels) is recommended:

Prior to development of any new access facilities or other projects that disturb the river bottom or cause sedimentation or cause degradation of water quality, a survey to determine the presence of the five fish species will be completed. If any of these species is found, appropriate mitigation measures will be implemented to avoid any effects to these species.

DETERMINATION

The following determinations were made concerning threatened, endangered and sensitive species.

1. Small-whorled pogonia - with suggested mitigation, no affect under any alternative.
2. Wiegand's sedge - with suggested mitigation, no impact under any alternative.

3. Darlington's spurge - with suggested mitigation, no impact under any alternative.
4. Large-flowered barbara's button - with suggested mitigation, no impact under any alternative.
5. Butternut Hickory - with suggested mitigation, no adverse impact under any alternative.
6. Short-headed garter snake - with suggested mitigation, no adverse impact under any alternative.
7. Hellbender - no adverse impact under any alternative.
8. Bald Eagle - slight may affect to roosting and foraging activities under all alternatives. With mitigation measures, no affect to nesting and productivity under all alternatives.
9. Peregrine falcon - no affect under any alternative.
10. Cerulean warbler - no adverse impact under any alternative.
11. Northern goshawk - no adverse impact under any alternative.
12. Water shrew - no adverse impact under any alternative.
13. Eastern small-footed bat - no impact under any alternative.
14. Indiana bat - no affect under any alternative.
15. Appalachian cottontail - no adverse impact under any alternative.
16. Allegheny woodrat - no impact under any alternative.
17. Northern riffleshell - with site-specific mitigation measures, no affect under any alternative.
18. Clubshell mussel - with site-specific mitigation measures, no affect under any alternative.
19. American burying beetle - no affect under any alternative.
20. Scudder's clubtail dragonfly - with suggested mitigation measures, no adverse impact under any alternative.
21. Green-faced clubtail dragonfly - with suggested mitigation measures, no impact under any alternative.
22. Ohio lamprey - with suggested mitigation, no impact under any alternative.
23. Bluebreast darter - with suggested mitigation, no impact under any alternative.
24. Spotted darter - with suggested mitigation, no impact under any alternative.
25. Tippecanoe darter - with suggested mitigation, no impact under any alternative.
26. Longhead darter - with suggested mitigation, no impact under any alternative.

CONSULTATION WITH OTHERS

Charles Bier, Ecologist, Western Pennsylvania Conservancy - written and personal correspondence and reference material

Carol Copeyon, TES Biologist, USFWS - personal conversation and reference material

James Hart, Mammologist, for Western Pennsylvania Conservancy - personal conversation

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APPENDIX L

PROPOSED ADMINISTRATIVE ACTIONS FROM THE
ALLEGHENY NATIONAL WILD AND SCENIC RIVER FINAL
ENVIRONMENTAL IMPACT STATEMENT AND FINAL
ALLEGHENY RIVER MANAGEMENT PLAN

APPENDIX L

PROPOSED ADMINISTRATIVE ACTIONS FROM THE ALLEGHENY NATIONAL WILD AND SCENIC RIVER FINAL ENVIRONMENTAL IMPACT STATEMENT AND FINAL ALLEGHENY RIVER MANAGEMENT PLAN

1. Inform the public of existing laws governing the river, encourage compliance with those laws, and cooperate with regulatory agencies in monitoring compliance and reporting violations.
2. Encourage the use of best management practices for oil, gas and mineral development and the use of the "Forest Stewardship Program" for timber management.
3. Work with law enforcement and municipal officials to control illegal activities in the river corridor.
4. Provide education and information about integrated pest management programs to foster understanding of the appropriate measures that will ensure the protection of river values.
5. Encourage the Pennsylvania Department of Environmental Resources to complete their five-year black fly study.
6. Encourage the Pennsylvania Fish and Boat Commission and the US Department of the Interior Fish and Wildlife Service to re-examine the state regulation which permits the harvest of 50 mussels/day by the public. This regulation has the potential to cause adverse impacts to two endangered mussels.
7. Encourage the prudent use of road oil by municipalities who are using it as a dust control measure.
8. Cooperate with the State to identify and plug orphan and abandoned wells that pose a threat to water quality.
9. Continue as a cooperator with the Allegheny Valley Trails Association to support their Rails-to-Trails efforts within the designated river corridor. Cooperate with additional Rails-to-Trails efforts from Emlenton to Kennerdell and from Oil City to Warren as new trail studies are developed.
10. Implement a separate analysis of the Allegheny Islands Wilderness using the "Limits of Acceptable Change" process to develop guidelines for their public use.
11. Work with Oil City to address the navigation hazard concerns at Oil City between the Wild and Scenic River segments.
12. Work with the US Army Corps of Engineers to better inform landowners living along the river and river visitors about significant water level changes and establish the high water mark.
13. Work with Pennsylvania Department of Transportation to improve the aesthetics of their maintenance yards within the river corridor.
14. Work with the Pennsylvania Fish and Boat Commission to provide better information for out-of-

state visitors to access sites about boat registration and to provide a convenient way to register boats.

15. Provide technical assistance, as requested, to landowners desiring to implement corridor guides.
16. Information and interpretive media will be coordinated with local agencies, Chambers of Commerce, Tourist Promotion Agencies, Oil Region Heritage Park, State agencies, etc., to assure accuracy and eliminate redundancy.
17. The Forest Service and the Pennsylvania Department of Environmental Resources will cooperate with and encourage riparian landowner organizations, local Chambers of Commerce, local governments, trail organizations, organized fishing groups, outfitters and guides, commercial establishments, etc., to develop appropriate means of meeting river users' recreational and informational needs.

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